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NEWS SUMMARY

GENERAL

Fallout fear at Chinese N-site

Contamination is being reported around China's nuclear test site, with local officials concerned at increasing incidences of cancer.

A Western diplomat was also told of fruit developing rubber-like patches and withering away.

The site, at Lop Nur in the far-western province Xinjiang, has been in almost constant use for 20 years. **Back Page**

Interviewee dead

A Merseyside man, interviewed for tonight's Brass Tacks BBC programme on complaints against police, was found hanged.

Typhoon havoc

At least 14 were killed and 14,000 made homeless as Typhoon Thad lashed central and northern Japan.

Flights caution

Leaders of the world's air traffic controllers held off on action to support their sacked U.S. colleagues, but further localised disruptions are possible. **Back Page**

Helicopters plea

Norwich North MP David Ennals called for a public inquiry into this month's North Sea helicopter crashes which killed 14. **Page 3**

Hijacker charged

A Warsaw man who said he worked for Solidarity was charged in West Berlin after hijacking an airliner to a U.S. base there. **Polish party "weaker," Page 2**

Jobless near 3m

Total unemployment close to 3m is likely to be revealed tomorrow, though it may not top this mark until next month. **Back Page**

Pinch on forces

West German armed forces may have to curtail autumn exercises because of the Bonn budget squeeze. **Page 2**

Bradford blaze

A West Indian club in Bradford's Textile Hall was wrecked by fire, six weeks after an arson threat.

Matterhorn toll

A 17-year-old Austrian descending the Matterhorn fell 1,000 yards to his death—the mountain's 11th victim this season.

Strait conquered

Disabled Bill Dunn, 61, became the first to swim the half-mile Strait of Corryvreckan off Strathclyde, beating Britain's most treacherous whirlpool.

Marathon man

Stan Curran celebrated his 34th birthday by winning the 26-mile Manchester race. About 8,700 took part.

New Test caps

Gooch and Gower are dropped from the England team for the sixth Test against Australia: their replacements are Larkins and Parker. **Trevor Bailey, Page 13**

Security snake

A priceless Sri Lankan sapphire goes on show at London's Commonwealth Institute today — guarded by a cobra installed in its glass case.

Briefly . . .

Tom Weiskopf (U.S.) won the York International golf tournament.

Blind water-ski pair crossed the Channel.

BUSINESS

Lloyds to charge Barclays clients

● **LLOYDS BANK** is joining National Westminster and retaliating with a 50p charge on Barclays customers who cash personal cheques at Lloyds branches. It will *continue to* cash cheques drawn on the other big banks at no charge. **Back Page**

● **EGYPTIAN** Central Bank is forbidding banks operating in Cairo to export foreign currency notes. **Page 2**

● **ISRAEL** is considering setting up a special fund to help Israeli diamond companies overcome difficulties caused by the slump in the world market. **Back Page**

● **FRANCE** set a deadline of September 16 for drawing up legislative texts for the bulk of the Government's nationalisation programme. **Page 2**

● **SOME UNDERWRITING** members of Lloyd's of London may be forced to change their underwriting arrangements at the insurance market after an internal row. **Back Page**

● **CITY ANALYSTS** have sharply contrasting views about the state of the economy **Page 3**

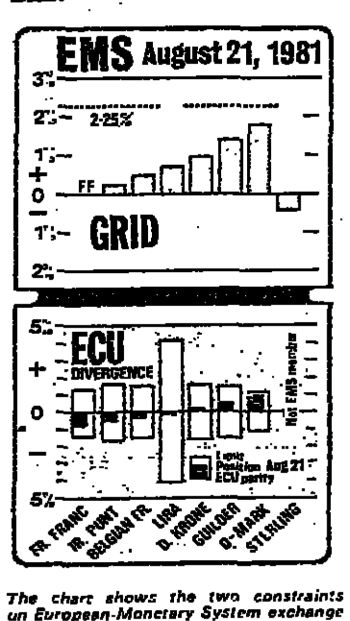
● **NATIONAL SAVINGS** net receipts fell to £193.5m last month, against £290.5m in June. **Page 3**

● **FINLAND** won three contracts from the Soviet Union worth FM 4.1bn (£482m)—two are for ships, the third is for construction and engineering work. **Page 2**

● **McDONNELL DOUGLAS** jet airliner manufacturing division *began a flight test programme* with a new version of its DC-8. **Page 2**

● **EUROPEAN CURRENCY** trading showed signs of nervousness last week. Trading was very quiet on Friday on *continuing fears of a possible* realignment of the members of the European Monetary System. The French franc replaced the Belgian franc as the weakest EMS currency, but there was no sign of heavy pressure, and the French currency remained well within its alarm bell divergence limit. The D-Mark was again the strongest member followed by the Dutch guilder and Danish krone.

Weakness of the dollar, reflecting the lower trend in Euro-dollar interest rates, helped to reduce the pressure on the EMS.



The chart shows the two constraints on European Monetary System exchange rates. The upper grid, based on the weakest currency in the system, defines the cross rates from which no currency (except the lira) may move more than 2¼ per cent. The lower chart gives each currency's divergence from its "central rate" against the European Currency Unit (ECU), itself a basket of European currencies.

CONTENTS

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Algeria seeks to barter its oil for Japanese goods

BY JAMES DORSEY IN KUWAIT

ALGERIA is seeking an oil-for-goods barter deal with Japan in a bid to resist pressure for a reduction in crude oil prices. Japanese officials expect other oil exporters whose trade is under state control—including Iran and Iraq—to table similar proposals.

The Algerian move is one of a number of measures being considered by members of the Organisation of Petroleum Exporting Countries following their failure last week to agree on a unified pricing structure. African producers of high-priced oil in particular are already meeting considerable resistance from traditional customers.

According to Japanese officials, Algeria wants to link its oil exports to the import of goods from Japan. Although Japanese companies *have not* formally rejected this proposal they have been pointing out the impracticalities of a barter arrangement.

The Algerians have been told that the Japanese Government does not favour non-oil companies *involving* themselves in oil deals. The companies have pointed out that in Japan foreign trade is conducted through private enterprise and not through state corporations, as in Algeria.

Japanese officials are also concerned that a barter arrangement would restrict their bargaining powers. A suspension of oil imports as a means of forcing a pricing reduction might imply an automatic halt to Japanese exports, they pointed out.

The Algerian proposal follows such a suspension of Japanese liftings of Kuwaiti oil. Four Japanese companies — Mitsubishi, Marouzen, Showa and Seibu—halted their imports on August 1 because they considered Kuwait's prices were too high. Kuwait has now offered to reduce its $6 a barrel premium on oil sold by $1.75.

Opec: Failure to reach a consensus, Page 14
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The two countries are still in dispute. *The four Japanese* companies want Kuwait to pay back the difference in premium which was paid in advance.

The Kuwait Petroleum Corporation, on the other hand, wants to deduct the amount overpaid from 1982 contracts, *yet to be negotiated. This offer* has been rejected by the Japanese because it would commit them to buying Kuwaiti oil next year irrespective of market conditions.

The four companies last week restarted lifting 135,000 barrels *a day of oil from Kuwait as* "an act of goodwill," indicating that they expected a pricing settlement soon.

Ray Dafter, Energy Editor, writes: The barter idea, now being suggested by Algeria, is likely to emerge as just one of several measures that will soon be proposed by many Opec members as a means of avoiding an overt price reduction.

Other ideas are little more than face-saving. They include extended credit periods for crude oil payments; subtle discounts; and the release of a *higher percentage of crude oil* on the fringe spot market.

But during the weekend there was general agreement in the oil industry that several major exporters would have to reduce their effective selling prices, given Saudi Arabia's *decision to maintain sales at* $32 a barrel—some $4 a barrel less than other Opec producers of similar oil, and about $8 less than African producers of premium-grade oil.

Nigeria has already indicated that it will lower its prices in order to restore some of its drastically reduced oil business. Within the industry it is expected that Nigeria will drop its price from around $40 to at least $35 a barrel—in line with the cost of North Sea oil—or even less.

Producers of premium-grade North Sea crude have already aligned themselves with Saudi Arabia's moderate pricing stance so UK and Norwegian rates will remain unchanged for the time being.

Mr Abdussalam Zagaar, the Libyan Oil Minister, said his country would reduce output if necessary—"even to zero"—in order to maintain its $40 a barrel price.

The minister said that Opec was facing a crisis. What was *the use of attending the next* Organisation meeting in Abu Dhabi in December "if the Saudis decide the price?" he asked.

During the weekend both the Iraqis and Iranians criticised Saudi Arabia's tactics in Geneva last week.

Contracts may depend on improved UK-Soviet relations

By David Tonge, Diplomatic Correspondent

THE SOVIET UNION warned leading British companies this weekend that major contracts could depend on improved Anglo-Soviet relations.

Mr Vladimir Sushkov, the Deputy Minister of Foreign Trade, emphasised that the Soviet Union was interested in long-term contracts with BP, British Steel Corporation *and Shell. He also held out* the possibility of increased co-operation in power, light industry, agriculture and the food industries.

But he linked economic co-operation with "the problems of curbing the arms race, *disarmament* and the strengthening of nations' security."

While favouring wider co-operation he added: "It is only natural that the Soviet Union will promote more active economic relations... with the countries which are its regular and reliable partners."

His statement was given by Novosti, the Soviet Press agency, to the Financial Times in London.

It is a mixture of carrot and stick. *British officials* suggest that Moscow is keen to underline the commercial disadvantages for Britain of following the tough stance which the Reagan Administration has adopted on both weapons and trade.

Mr Sushkov apparently wishes to discourage Britain from backing U.S. attempts to limit the transfer of technology to the Soviet Union. The carrot in the Soviet approach to the UK has been shown in a series of recent minor orders for ship repair.

He referred implicitly to the relatively strict British application of the Western security embargo on technology transfer when he said the British market "has erected many barriers" causing British companies often to lose large-scale contracts to other Western countries.

Equipment contracts now under negotiation with the West totalled about Roubles 2bn (£1.4bn). He said British chances depended on the competitive abilities of proposals, "on technological, commercial and other conditions."

The companies mentioned by Mr Sushkov refused yesterday to comment on the *political side of his speech* but confirmed their interest.

The Deputy Minister said that the Soviets were discuss-

Continued on Back Page

Thatcher may agree to meet H-block MP

BY MARGARET VAN HATTEM, LOBBY STAFF

MRS THATCHER and other Ministers may agree to meet Mr Owen Carron, the newly-elected MP for Fermanagh and South Tyrone, early next month.

However, it was being emphasised in London yesterday that there could be no question of negotiation on the five demands put forward by the Maze prison hunger strikers, whom he represents.

Mr Carron, who won Thursday's by-election with a 2,230 majority—an increase on that of the previous MP Bobby Sands—said yesterday that his formal application to see the Prime Minister could be put forward today.

Speaking on BBC radio, he made it clear that the main purpose of such a meeting would be to discuss the hunger strikes and the five demands.

He said: "The Government has a right and a duty to meet me and to enter into talks with the prisoners on the five demands. The two *major* issues are those of work and of association. The Government has a duty to move towards the prisoners on those issues.

"We believe there are divisions within the Cabinet on the handling of the H-block issue. My *election* has provided a golden opportunity for the British Government to solve the issue without loss of face."

In spite of pressure from the Irish Government to settle the issue, and concern over the amount of sympathy for the *prisoners being generated* abroad, the Government has given no indication that it is looking for a face-saving solution. Reports that a compromise was imminent early in July are still being denied.

However, the possibility of a *mid-September* Cabinet reshuffle involving the replacement of Mr Humphrey Atkins, the Northern Ireland Secretary, is not being ruled out.

Although Mr Carron's election is being discounted as a sectarian vote rather than a vote of support for the hunger strikers, it is clearly an embarrassment that in an exceptionally high turnout he won on the specific platform of support for the five demands.

Some ministers privately express doubts as to the effectiveness of the Government's criminalisation policy in Northern Ireland, however well it may be received in the rest of the UK, and believe there is room for modification.

Others, already concerned over the amount of international publicity that the hunger strikes are receiving, will not be reassured by Mr Carron's declaration that he sees no point in going to Westminster and intends to use his position "to highlight the H-block situation at home and abroad."

The Government has already anticipated this by circulating to its embassies in Europe and the U.S. dossiers on the hunger strikers for distribution to foreign media.

These provide a picture of the hunger strikers, a resume of their activities, arrest, trial and sentence, together with a selection of Press clippings covering these, largely from Irish newspapers.

These appear to be aimed largely at the U.S. where there are indications that sympathy for the hunger strikers is no longer confined to the Irish-American population, and where the prospect of increased financial support in response to an emotive lecture tour by Mr Carron is causing anxiety in both London and Dublin.

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Laker denies that three Airbuses are for sale

BY ALAN FRIEDMAN

SIR FREDDIE LAKER yesterday dismissed as "totally untrue" a report over the weekend that Laker Airway's three A-300 Airbuses were for sale.

Sir Freddie described as "pure unadulterated rubbish" the suggestion that the aircraft were available at the right price. "The A-300s are not for sale. You don't sell wide-bodies. You buy wide-bodies. You sell junk," he declared yesterday.

Sir Freddie's denial came in the wake of speculation about measures Laker Airways might take to raise money to meet a possible £6m loss relating to the repayment of capital and interest on dollar denominated loans.

Last week Sir Freddie cited unfavourable currency movements and asked his bankers to re-schedule for six months capital repayments this year on over $300m of outstanding long-term debt which has been extended to help finance the purchase of the three Airbuses

Continued on Back Page

Employment legislation under fire from unions

BY JOHN LLOYD, LABOUR CORRESPONDENT

THE TUC is set to commit itself to more outright opposition to Government policies and legislation than it has shown over the past two years.

The final agenda of the 113th Trades Union Congress, to be held in Blackpool next month, *will include motions on the need* for active opposition to past and future employment legislation, the working of the Youth Opportunities Scheme, attempts to replace statutory training boards with voluntary schemes and the role of the Government-*appointed Certification Officer.*

The Fire Brigades Union has tabled the most forthright challenge to the legislation, widely expected to be introduced in the next session of Parliament, aimed at further restricting the closed shop. It *calls for "a policy of non-com*pliance" with any such laws.

The General and Municipal Workers, the National Graphical Association and the Sheetmetal Workers all call for complete, vigorous or total opposition to the 1980 Employment Act, *whose measures have so far have* not excited major conflict.

Last week, the TUC's employment policy and organisation committee reaffirmed its support for the closed shop, rejecting the view that the judgment of the European Court of Human Rights in favour of three railwaymen dismissed by British *Rail for refusing to join a* union, required further curbs on the closed shop.

The issue of youth unemployment, the subject of a detailed motion from the Civil and Public Servants Association, is accompanied by six amend*ments from other unions.*

The Transport and General Workers, the TUC's largest affiliate, calls for increased trade union control over the Youth Opportunities Programme and for work experience schemes—which take in some 242,000 *young workers—to be restricted* to union-organised workplaces. It also calls for the promotion of union representation among YOP trainees.

The success of this motion would handicap the operation of the work experience pro*gramme, since the scheme,* administered by the Manpower Services Commission, depends on TUC support.

The Government's policy of encouraging voluntary training boards as a replacement for the statutory boards existing in *most industrial sectors* attracts the opposition of two print unions, the NGA and Sogat. The NGA calls for a policy of non-co-operation with any voluntary training arrangements.

The role of the Certification Officer, who exercises jurisdiction over union mergers and administration, is sharply criticised by the Post Office Engineers, the Health Service Workers and the white-collar union, ASTMS.

The health service workers call for a review of the 1913 legislation governing trade union political funds aimed at ensuring that "employers are no longer advantaged in respect of their political contributions in comparison with trade unions."

The expected swing by the TUC to outright opposition to the UK's membership of the European Community is opposed by the white-collar union, Apex, and the Electrical and Plumbing Trades Union, which amend motions on withdrawal to call for a referendum before withdrawal — the TUC's present position.

The Congress is also likely to back a stronger line on nuclear disarmament than any it has so far endorsed. Support for the aims of the Campaign for Nuclear Disarmament has run high in unions over the past year and only the EPTU shows, in its motion, its traditionally strong defence for the multilateralist position.

A swing to unilateralism, and to outright opposition to the EEC, would bring the TUC into line with the Labour Party on two of the most divisive issues in the Labour movement.

Government looks at ways to prevent underspending on health

BY GARETH GRIFFITHS

THE GOVERNMENT is looking at ways of improving the finan*cial links between the health* service and local authorities. It hopes in this way to prevent the underspending of money allocated for joint financing—a problem that has persisted since the scheme was set up in 1976.

Joint financing involves projects run by the area health authorities and local authority social services departments. Most of the money is spent on the elderly and the mentally handicapped and the Government views it as one of the main ways of moving patients away from long-term hospitals into community care.

But local authorities have to fund part of the capital and revenue costs for the schemes. They say they are unable to take full advantage of the schemes on offer because they are unable to meet costs due to the squeeze on local authority expenditure.

Dr Gerard Vaughan, the *Health Minister, on a visit to* Liverpool last week found that the area health authority in the city had not spent £808,000 of the money allocated to it because it had been unable to agree joint schemes with the Liverpool City Council. He described such underspending as tragic at a time of restricted resources.

This has led to some £12.3m of the allocation for joint financing being unspent by 1979-1980, some 12 per cent of the total allocation. Last year the underspend was estimated to be £9.4m or 5.7 per cent of the total allocated.

Under the joint financing rules, unspent money is carried over in the area health authority's bank account.

There has also been a sharp rise in the money allocated. In 1976/77 the allocation was £16.4m and this year £68.5m. A further increase to £71m is planned next year. (November 1980 prices.)

Underspending by the regional health authorities last year was about £11m on their overall budgets. But ministers and officials are worried about joint financing because it has thrown into sharp relief the tensions between local and central government spilling over into the health and social services sector. Joint financing is discretionary and local authorities don't have to take part.

Under the present rules area health authorities can meet the majority of the capital costs of a project and all the revenue costs for the first three years. But by the end of seven years the local authority has to meet all the revenue costs.

Lancashire County Council estimates that when its 94 projects under joint financing are financed locally they will absorb 20 per cent of the total budget.

OVERSEAS NEWS

Army exercises may be hit by Bonn squeeze

BY ROGER BOYES IN BONN

WEST GERMANY'S armed forces may have to reduce their military exercises this autumn because of the severe financial squeeze in the Bonn budget. Although Defence Ministry *officials stressed yesterday that* the country would still participate in large Nato manoeuvres, the cutbacks are sure to add to the friction between the United States and West Germany on the *level of the latter's defence* spending.

The Defence Ministry calculates that it will have to trim DM 200m (£44m) of planned spending by the end of this years, a unexpectedly large sum which has at least partly been induced by the weakness of the D-Mark against the dollar. This has pushed up Bundeswehr fuel costs much higher than expected and strained the allocations for manoeuvres. Senior corps commanders are to meet on Thursday to decide how the exercises can be pruned, although there is apparently no question of completely scrapping West German participation in the "sharp blade" exercise, or other Nato-related manoeuvres.

The problems facing the army this year will clearly intensify in 1982. The defence budget is due to rise by only 4.2 per cent next year. With anticipated inflation of about 5 per cent, the allocation will drop in real terms. The U.S. has already made its displeasure known but the West Germans have argued consistently that their essential defence capability has not been affected. However, a reduced participation in manoeuvres would certainly deal a blow to this line of argument.

Meanwhile, the wrangling over Bonn's overall budget for 1982 continued at the week-end, though Chancellor Helmut Schmidt stressed that the ruling Social Democrat-Free Democrat coalition was not seriously threatened and would survive until 1984.

Bonn has managed to gain public sector savings commitments of about DM 14bn for 1982 but is looking for further cuts of DM 5bn. This has engendered two levels of arguments within the coalition.

First, the Free Democrats are resisting Left-wing Social Democrat pressure for a special supplementary tax to help create employment. There still seems to be no uniform concept within the coalition of how the unemployment problem is to be combated. Second, Ministers (or at least their deputies) are trying to minimise the effects of the cuts on their departments.

Even so, a number of pet projects have had to be dropped. The Research Ministry said last week, for example, that it was no longer sure it could finance the Government's contribution towards the country's only fast breeder nuclear reactor.

S. African businessmen critical over squatters

By Bernard Simon in Johannesburg

THIRTEEN PROMINENT South African businessmen have joined the protest against the Government's demolition of the Nyanga squatter's camp near Cape Town and the deportation last week of 1,000 of its residents to the Transkei tribal "homeland."

In a strongly worded statement, the businessmen, all of whom live in Cape Town, said that "while we are disturbed at the repercussions abroad, our chief worries are the inevitable further deterioration in relations between the different racial groups, the seeming indifference to individual suffering and the effect on our own moral standards."

The signatories include the chief executives of several of South Africa's largest retailing groups, among them Woolworths, Pick 'n Pay, Garlicks and Pep Stores. The coordinator of the statement is Mr Len Abramhamse, a director of the country's leading life assurance group and several other well-known companies.

It illustrates a growing impatience among many South African business leaders at the Government's lack of progress towards racial reforms.

Kuwait oil fire

A fire raging since Wednesday night in Kuwait's Shuaibah refinery has been brought under control, writes James Dorsey. Officials said nine storage tanks *have been damaged — three are* still burning. They discount sabotage as a cause for the fire

Fighter price soars

The rise of the U.S. dollar has forced Denmark to pay more than \$8.6m each for its *latest shipment of F-16 fighters,* more than 40 per cent above the maximum agreed when the deal was *signed in 1977.* Mr Poul Soegard, the Defence Minister, has announced, AP reports from Copenhagen.

Obote raises wages

President Milton Obote of Uganda has increased the minimum monthly wage from £2.75 to £6.55 after coffee exports almost trebled during his eight *months in power,* Reuter reports from Kampala.

Polish party 'dangerously weaker'—officials

BY LESLIE COLITT IN WARSAW

THE POLISH authorities and Solidarity, the independent union, are engaged in a widening series of conflicts, the outcome of which could weaken further the Government's control over the country. Officials speak of a "dangerous erosion" of power from the Communist Party in the month since the party congress.

Several of the regional conflicts appear minor, but they reflect relations between the *Government and Solidarity.* Such a poisoned atmosphere does not augur well for the talks between the two sides planed for this week.

At the Baltic port of Gdynia, dockers continued to block the export of 100 containers of canned meat to Britain and the U.S. Printers in the nearby city of Olsztyn refused to bring out the district party newspaper for the fifth day.

The dockers insisted that meat could not be exported while supplies for Poles were nearly exhausted. The union derided the Government's argument that it can import two tonnes of meat for every tonne of exported processed meat.

Printers of the 100,000 circu*lation Glos Olsztynski said they* would continue their strike, a prolongation of last week's two-*day national newspaper shut*down, in spite of an appeal to go back to work by Mr Lech Walesa, Solidarity's leader. The printers were protesting against what they called the "slandering" of the union in television news, which said force was used to keep non-Solidarity printers from working last week. Solidarity in Olsztyn said 300 *printers, including non*-Solidarity members, voted to continue the stoppage by 299 *to one, with seven abstentions.*

The Soviet Union's ruling *Politburo* has warned of "crisis phenomena" in Poland and reasserted the "Brezhnev doctrine" that Socialist countries must watch out for each other's welfare.

It called on the Polish Government to stick to the principles of Soviet-style Marxism and act to revive the economy.

The appeal came a week after President Leonid Brezhnev had talks with Mr Stanislaw Kania, the Polish party leader, and General Wojciech Jaruzelski, the Prime Minister.

Agencies

The printers are demanding that national television correct its allegation. Under Solidarity's statute, regional strikes cannot be halted by union leadership.

In the southern industrial *centre of Katowice, Solidarity's* section at the huge steel mill said some 20,000 workers will *vote in secret ballot early this* week on whether to dismiss Mr Stanislaw Bednarczyk, the *director of the plant.* He ordered the closing of a Solidarity printing press after *it circulated caricatures of a* Russian bear, which the authorities called anti-Soviet.

Mr Stefan Bratkowski, head of the journalists' union and a reform-minded Communist who supports Solidarity, cautioned in his column in the national newspaper Zycie Warszawy: "Whoever believes he can defuse social frustration by allowing kids to pinch the bear, please keep in mind that bears do not stop at unruly kids. It would be wiser to make friends with the bear and not enemies."

Gen. Wojciech Jaruzelski, the Prime Minister, said on television the Government would not *tolerate removal of company* directors "in a wheelbarrow." The authorities fear that, *if Solidarity succeeds in ousting* the director, a conflict with the Government over workers' self-management might be decided in a fait accompli by the union.

Egypt bans export of banknotes

By Alan Mackie in Cairo

THE EGYPTIAN central bank has forbidden banks operating in the country to export foreign currency notes. The ruling, which effectively has been in force for the past two weeks, *has left foreign* banks with an estimated \$28m worth of banknotes which *they can no longer* remit abroad. These banks are still accepting dollar bills for *payments but the net effect* of the measure, should it continue to be applied, will be to *create a premium for draft as* against cash payments.

The restriction appears to be one more attempt to bring down the dollar in the open market after the failure of the measures introduced on August 1 to stabilise the Egyptian currency. These included a 20 per cent devaluation of the Egyptian pound for commercial banking transactions to 84 piastres to the dollar and changes in the method of payments of cash margins on some letters of credit. Since then, however, the dollar has strengthened in the open market from 88-89 piastres to 94 piastres.

The rationalisation of the trade system to regulate the import of luxury goods is tied in with a more general move to bolster reserves.

Haig confident Libya has learnt its lesson

BY REGINALD DALE, U.S. EDITOR IN WASHINGTON

MR ALEXANDER HAIG, the U.S. Secretary of State, said *yesterday he was confident that* Libya would stop attacking U.S. forces in the Mediterranean after they shot down two Libyan jets last week.

The Libyans had been test*ing the U.S.,* he said, and he did not believe the decision to engage U.S. aircraft had been taken on the spur of the moment.

Mr Haig said President Ronald Reagan had personally approved the naval exercise partly in waters claimed by the Libyans which led to the incident. The President had also approved personally the rules *of engagement,* under which the U.S. pilots returned Libyan missile fire.

The Secretary of State stressed that Mr Reagan had not decided how and where to *base the new MX mobile inter*-continental missile and that the Administration was determined to press ahead with another controversial decision to sell five early warning and control aircraft to Saudi Arabia.

On the MX, Mr Haig said on television he was confident that the *so-called "triad"* concept of U.S. strategic forces would be maintained—meaning that missiles would continue to be based on land, sea and air. Mr Casper Weinberger, the Defence Secretary, has recently been reported to favour putting the MX on giant aircraft, whereas Mr Haig thinks it should be based on land. The airborne basing proposal has come under strong attack, both from important congressional leaders and air force generals.

Mr Weinberger is now thought to be backing away from the proposal and Mr Reagan may ultimately decide on a modified version of President Jimmy Carter's plan to spread 200 MX missiles around 4,600 silos in the Utah-Nevada desert.

Ihsan Hijazi writes from Beirut: Arab criticism of the U.S. over the shooting down of the two Libyan fighters is growing, with Arab conservatives joining in. There are also fears that the incident may have set the stage for a confrontation between the U.S. and certain sections of the Arab world.

The conservative view was reflected in a statement issued by the six-nation Gulf "Co-operation Council" which accused the Reagan Administration of resorting to "medieval practices" and of "encouraging cowboy diplomacy." The Council comprises Saudi Arabia, Kuwait, the United Arab Emirates, Bahrain, Qatar and the Sultanate of Oman.

The Co-operation Council's statement was issued by Mr Abdullah Bishara, its Kuwaiti secretary. It is thought that member-states may have chosen this way to react to the incident rather than to comment directly. There has been no official or Press reaction so far from Saudi Arabia, which has no diplomatic relations with Libya.

The Syrian Chief of Staff, Major Gen. Hikmat al Chehabi, paid a surprise visit to Tripoli

France sets deadline for takeover Bills

BY DAVID WHITE IN PARIS

THE FRENCH Government has set itself a deadline of September 16 for drawing up legislative texts for the bulk of its ambitious nationalisation programme.

The Cabinet is due to approve takeover Bills covering private banks and eight industrial concerns on that date. The Bills then have to go through a committee stage before they come up for debate in the Socialist-dominated National Assembly.

The Government is anxious to have them voted by the end of the year, which may mean it *has to request a shortened de*bate.

The fact that it is pushing its timetable for the nationalisation programme to the limit seems to indicate that its experts are making heavy weather of some of the more complex cases.

M. Pierre Moussa, chairman of the powerful Paribas banking and industrial holding group, said at the end of last week that the Government had not yet decided exactly what it wanted to do with the group's share portfolio or its foreign interests.

He warned that bank nationalisation threatened to reduce French chances of success abroad, particularly in the Gulf states where the big French state-owned banks had faced difficulty obtaining authorisation.

An interministerial committee is understood to have finalised plans last week, however, for the five principal industrial groups on the list, covering a large part of the electronics, chemicals, glass and metals industries.

Although no details were released, shares in these companies recovered sharply on the stock market on Friday, amid rumours of a forthcoming suspension of quotations.

Balsemao wins over critic

BY DIANA SMITH IN LISBON

THE LEADER of Portugal's Christian Democrat Party, Sr Diogo Freitas do Amaral, has accepted Sr Francisco Pinto Balsemao's invitation to take a *senior post in his next Cabinet.* Until recently, Sr Freitas do Amaral was one of the Prime Minister's harshest critics.

This concession by a senior member in the ruling coalition of Social and Christian Democrats and Monarchists, will make it easier for Sr Balsemao to form a strong Cabinet that can tackle the economic difficulties caused by a growing balance of payments deficit, and withstand the political repercussions that are expected when austerity measures are introduced later this year.

Sr Freitas do Amaral had previously said he would not serve in government as long as President Antonio Ramalho Eanes was in office. But his ambiguous role in the recent Government crisis weakened his cherished position as a lofty *judge of Sr Balsemao's record* as Premier.

WORLD TRADE NEWS

Finns secure £482m Soviet orders

BY LANCE KEYWORTH IN HELSINKI

FINLAND has won three contracts from the Soviet Union worth in total about FM 4.1bn (£482m). Two orders are for the shipbuilding industry, and the third goes to a consortium of construction and engineering companies.

The biggest contract, valued at FM 2.3bn, is for phases two and three of the Kostamus project. *Kostamus is the iron mining* township and industrial production plant that the Finns *have been building in the Soviet* Union a few miles east of the Finnish border.

The first phase, a township for 10,000 will be completed next year. The second and third phases are scheduled for completion in 1983 and 1984. They will enlarge the township to 15,000 and production facilities to an iron pelletisation capacity of *9m tonnes a year.*

The Finnish construction and engineering consortium in the Kostamus project is Finnstroi, and the Soviet trade organisation is Promashinimport. Apart from the money value of the contract, the Finns expect to gain by its effect on employment — Finns are employed in Kostamus — and the export of iron pellets from Kostamus to their iron and steel works in Raahe, on the west coast.

The second contract, worth about FM 1bn, has been signed between Wartsila and Sudoimport of the Soviet Union. The Finnish company is to deliver nine vessels designed for navigation in Arctic ice, one of its specialities.

Three will be ice-breaking multi-functional cargo vessels, each of 20,000 dwt. The Soviet Union has another six vessels of this class on order from Wartsila.

Two of the latest vessels to be ordered are ice-breaking rescue/salvage ships with a displacement of 4,200 tonnes each, and the remaining four are supply ships for use in Arctic offshore oil fields.

The third contract is with the Finnish company, Valmet, and its order is for 13 special vessels for use in Arctic conditions. It is worth about FM 800m. Most of the vessels are for use by the Soviet Natural Gas Ministry. Valmet is to complete delivery in the next three years.

Old DC-8s get new lease of life

BY MICHAEL DONNE, AEROSPACE CORRESPONDENT

McDONNELL DOUGLAS' jet airliner manufacturing division has begun a six-month flight test programme with a new version of its *DC-8 four-engined* jet airliner — the DC-8 Series 71, which has been re-engined with *the Franco-U.S. CFM-56* engine.

The flight tests are considered of vital significance for McDonnell Douglas and the DC-8 airliner, now out of production. But 135 of these aircraft, which still have extensive "fatigue lives" are to be *re-engined with the fuel-efficient* CFM-56 engines to give them a longer lease of life.

The re-engined programme is being directed by Cammacorp of California. McDonnell Douglas is responsible for engineering, engine installation and flight testing and certification. Grumman Aerospace produces the engine nacelles and Garrett AiResearch is responsible for *the environmental control systems.*

The engines, of up to 24,000 lbs thrust, are built by CFM *International, a joint company* set up by Snecma of France and General Electric of the U.S. *Cammacorp estimates that the* re-engined DC-8s will cut noise around airports by up to 70 per *cent, and will give operators* annual savings of between 1m and 1.5m gallons of fuel per air*craft.*

The 135 aircraft now being re-engined come from many airlines, mostly in the U.S., headed by United, with a large fleet of DC-8s due to be converted.

For CFM International, the *DC-8 tests are critical.* The engine has been tested in the prototype YC-15 short take-off *and landing aircraft for the U.S.* Air Force, and is also to be used in re-engining some of the *U.S. air force's KC-135 tanker transports.*

The DC-8 market will provide *CFM International with several* hundred million dollars worth of business over the years ahead, *but more significantly will help* to establish the company as a force in the international aero*engine market, especially since* it has plans for new versions of the CFM-56.

Stent wins £19m deals overseas

By Our World Trade Staff

STENT FOUNDATIONS, a *subsidiary of Balfour Beatty,* has won overseas contracts worth £19m, including one *worth £11m for deep-drilled* piles on Das Island in the United Arab Emirates.

CBI Construction, the main contractor, is building seven cryogenic tanks for *storing liquefied petroleum* gas and liquefied natural gas for the Abu Dhabi National *Oil Company. Stent's piling* contract will provide the foundations for five of these.

Balfour Beatty said work will start next month and be carried out in a joint venture with SIF Bachy of France.

Stent has won a £5m ground improvement contract in Indonesia to be carried out in a joint venture with Sol-Compact, a subsidiary of the French Intrafor Cofor company, and through Balfour Beatty's Indonesia associate company.

The Indonesia project will support a tank farm construction programme being undertaken by Bechtel International of the U.S. for Pertamina, the Indonesian oil company.

Two other projects, worth a total of £2m, are for piling projects in Qatar and Abu Dhabi.

● Simon-Hartley has won £7.5m in orders for sewage treatment projects overseas, the largest of which is a £5m turnkey mechanical/electrical contract for a complete treatment works for Sharjah in the UAE.

● W. H. Smith and Company of Shropshire, the structural engineering concern, has received letters of intent for contracts worth £1.5m. The largest of these calls for the supply of 750 tons of steelwork for a white cement plant at Khaldiya in Jordan for the Syrian Jordanian Company for Industry.

Lorne Barling examines the revival of a dying craft

Gun maker gets U.S. in its sights

IT IS IRONIC that an historic *failing of British industry—the* lack of investment in volume production equipment — ultimately should benefit the few remaining exponents of one of the country's oldest skills, the *manufacture of shotguns.*

The decline of the British shotgun industry spans more *than 80 years, and was mainly* caused by government restraints on sales at home and abroad. *More than 200 small companies* closed during that period, leaving about a dozen. Among them *are the great names of Holland* and Holland, Purdey and the less well-known company *W. and C. Scott of Birmingham.*

Over the past 20 years ascendancy has been gained by high volume gun manufacturers in the U.S., Spain, Italy, Japan and the Soviet Union, which is now undercutting almost everyone on price.

As a result of this modernisation, almost all these countries have lost the old skills of making fine quality guns by hand. Only Britain continues to do so in any quantity, albeit small.

W. and C. Scott, founded in 1834 and re-established as an independent company after the recent problems of Webley and Scott, is persuading more and more American hunters, collectors and investors that English shotguns, though expensive, are well worth buying.

Until recently the company marketed its guns through the normal channels — importers, wholesalers and retailers—who added about 70 per cent to the price, and with the addition of U.S. taxes and tariffs, the final retail price was at least three times the ex-factory figure of well over £1,000.

This was unacceptably high for U.S. sportsmen, who can buy an average quality shotgun for about \$200 (£110). The system meant Scott guns were being *sold by retailers who were not* fully aware of their qualities

Buyers are lured by hand-engraving on W. & C Scott's Bowood shotgun

of precision, lightness and—perhaps most important—their almost unsurpassed investment value. Scott points out that a new English gun, bought in 1970 and used for 10 years before being resold, would almost certainly have realised more than four-and-a-half times the original price, outstripping nearly all conventional investments.

The company decided to change its approach in the U.S. and appointed Oshmans of Houston, which owns the Abercrombie and Fitch chain of stores, as its sole importer.

This allowed Scott's two new guns, the Bowood and the Chatsworth models, to be exclusively marketed in the U.S. at prices ranging between \$5,000 and \$8,000 by Oshmans, which agreed to take a lower mark up *in recognition of the prestige* nature of the product. The guns are available at roughly the equivalent UK price.

Scott has recognised the need to explain to American buyers the reasons why English guns are made as they are, as the style of shooting in the U.S. is quite different.

Mr Pat Whatley, Scott's managing director, and two colleagues recently returned from a week-long promotional trip to Texas where they held a number of seminars and gave practical shooting instruction to potential buyers.

The result, though small in value terms, has been encouraging. A total of 50 Scott guns, valued at about £85,000 have been sold in the U.S. this year, compared with a handful in 1980. With total annual output of about 250 double-barrelled guns, these exports are important and indicate that sales potential in the U.S. is good.

The company, which employs *just 31 people, made a small* profit in 1980, its first full year of independent operation under *the continued ownership of* Harris and Sheldon. This year turnover is expected to be *about £400,000 and profits are* expected to improve.

Mr John Hill, the marketing director, said: "The American market is extremely promising, but people need to be reassured about why they should spend at least \$5,000 on a shotgun."

Equally important, Oshmans sales staff in the U.S. are being instructed on the special qualities of the guns, such as their rarity, long life and shooting performance. They are able to point out impressive facts, much loved by Americans, such as that the gun stocks are made from finest French walnut, each costing about £300 in rough form.

Scott is planning to increase its range of guns. It recently re-introduced the single-barrelled Greener GP, which has been out of production for four years. A new double-barrelled gun called The Texan has been specially designed for the U.S. market.

The name W. W. Greener, famous in Africa for decades, was acquired some years ago by Webley and Scott. Mr Hill says that in Africa memories are long when it comes to guns. There are Greener countries, he says, where virtually no one will buy a Webley gun, and there are Webley countries, such as Nigeria, where almost no one will buy a Greener.

This dates back to the early part of the century when Messrs Greener and Webley each visited different African countries and secured product loyalty undreamed of by modern marketing men.

In total, about 500 hand-made guns are produced in the UK each year.

SHIPPING REPORT

Demand up for large oil tankers

BY LYNTON McLAIN

CRUDE OIL freight rates increased last week as customers sought access to the unusually small amount of large tanker tonnage available.

Rates for very large crude carriers moved up about four *points to Worldscale 27½.* Similar changes were reported for ultra-large crude carriers, with the latest 312,000-dwt-tonne vessel reported at Worldscale 26.

Smaller vessels *were not in* demand and rates changed little over the week. The one exception *was the Indonesian* market where vessels of 80,000 tonnes were chartered to Japan at about Worldscale 50. Larger vessels were chartered from Indonesia at Worldscale 40 for *discharge on the U.S. west* coast.

In the Mediterranean, demand improved from previ*ously low levels which forced* many vessels to be laid up.

Rates improved from Worldscale 40 at the start of the week for an 80,000 tonne vessel for passage across the Mediterranean to Worldscale 52½ for an 85,000 tonne vessel for the same voyage.

Vessels for discharge to the U.S. fared less well and rates *changed little.* A 65,000 tonne vessel was chartered for the U.S. at Worldscale 35.

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U.S. paper exports rise

WASHINGTON — *Exports* of U.S. paper and allied products exceeded imports last year *for the first time* since World War II, reports the U.S. Commerce Department.

Exports rose by 46 per cent to \$5.4bn (£2.9bn) in 1980, the department said. Imports increased by 9 per cent in 1980 to \$5.2bn. AP

Mexico, E. German deal

MEXICO CITY—Altos Hornos de Mexico, Mexico's largest steel producer, said it is taking part in a venture with Technocomerz, an East German company, to make industrial equipment.

An official for the companies said they will invest the equivalent of \$88.6m (£48.6m) in a plant to make controls to regulate the speed of generators, turbines and other equipment.

The venture will be called *Asug Mexicana S.A. de C.V., and* the plant will be built in the Mexican state of Tlaxcala.

Altos Hornos and Nacional Financiera, the Mexican Government's industrial development bank, will hold a 65 per cent stake in the venture. Technocomerz will own the remaining 35 per cent and will supply technology and licensing.

AP-DJ

World Economic Indicators

RETAIL PRICES (1975=100)

					% change over previous year
	July '81	June '81	May '81	July '80	
UK	220.4	219.4	218.2	198.7	10.9
	June '81	May '81	April '81	June '80	
West Germany	129.2	128.6	128.0	122.4	5.6
Italy	253.6	251.0	[illegible]	209.7	20.9
France	184.1	182.[illegible]	180.7	162.6	13.2
Netherlands	143.5	143.[illegible]	142.[illegible]	134.5	6.7
Belgium	144.7	[illegible]	[illegible]	134.7	7.4
U.S.	168.2	166.8	[illegible]	153.6	9.5
Japan	144.8	[illegible]	[illegible]	137.8	5.1

Source: Eurostats (except Japan)

Ennals renews plea for inquiry into N. Sea helicopter crashes

BY JOHN GRIFFITHS

A NEW PLEA for a public inquiry into the two recent North Sea helicopter crashes in which 14 people died has been made by Mr. David Ennals, Labour MP for Norwich North, and former Social Services Secretary.

Mr. Ennals urges Mr. John Biffen, Trade Secretary, to reverse a decision by his department that a public inquiry should not be held because accident inspectors are already making their own inquiries.

On August 12 an oil platform worker was killed when a Bell 212 helicopter ditched in the North Sea near Shell/Esso's Dunlin field platform. Only 24 hours later 13 men died when a Wessex helicopter crashed off Norfolk. Both machines were owned by Bristow Helicopters.

The remains of the first helicopter and the rotor assembly from the second are being examined at the Royal Aircraft Establishment at Farnborough, Hampshire.

In the letter to Lord Trefgarne, the Trade Under Secretary Mr Ennals says that although a public inquiry would *not throw any more light on the* immediate causes of the accidents, "a wider-ranging public inquiry into the conduct of helicopter operations in support of *North Sea oil exploration is* needed."

He refuses to accept assurances on a number of opera*tional points sent* to Lord Trefgarne by Sir Nigel Foulkes, chairman of the Civil Aviation Authority, who said the acci*dents should* be viewed against a record of only one fatal accident in the previous decade.

Mr Ennals's main points of concern include:

Flotation devices: "I am not satisfied that the practical tests to prove flotation ability in all conditions are adequate."

Code of performance: Publication of a compulsory code of practice was needed "to enable *a uniform standard of performance* to be achieved."

Pilot fatigue: "Helicopter limitation [on duty hours] are already more lax than for aeroplanes and *one accident* has already accurred on the North Sea in which the pilot had flown more than 60 sectors [take-offs and *landings*] in *his* duty period."

Mr Ennals says there is an increasingly urgent need for back-up radar surveillance at Aberdeen airport, now Britain's third busiest; and for full inspection of platform landing facilities as "concern has *already* been expressed about the standards on the platforms and the training of their helicopter landing officers."

The regulation that *all* North Sea helicopters should carry two pilots should be enforced, and all passengers on North Sea *helicopter* flights should have compulsory training on what to do if there is a forced landing.

Pan American extends 'one goes free' concept

BY OUR AEROSPACE CORRESPONDENT

PAN AMERICAN is extending its "one goes free" concept of First-class and Clipper Class air travel.

First introduced on the Miami route earlier this summer, the scheme provides for one free ticket for anyone who buys either a First-class *or Clipper Class* air ticket on the airline, provided outbound travel is made before October 14, and the two people travel together.

The airline is extending the scheme to its routes from London to San Francisco, Los Angeles, Seattle and Houston. In Houston only the First-class free offer will prevail.

The airline is also introducing services from Kennedy (New York) to Atlanta, Chicago, Dallas/Fort Worth and Philadelphia.

Low-season bookable round-trip fares from London are: *Atlanta, £308; Chicago, £294;* Dallas/Fort Worth £325; and Philadelphia £229.

Heathrow expansion opposed

BY MICHAEL DONNE, AEROSPACE CORRESPONDENT

THE London Borough of Hammersmith, which lies under the approach pattern to Heathrow Airport, is to object at the forthcoming Stansted Airport public inquiry against any fifth terminal at Heathrow.

The borough, which claims that its residents already suffer "intolerable traffic and environmental burdens" from Heathrow, says that any fifth terminal at the airport, as proposed by British Airways, would have "incalculable effects" on Hammersmith.

A further 15m passengers a year, which the borough believes the fifth terminal would involve, "is something we would do everything in our power to stop," says Councillor Putnam, deputy leader of the council. "We also hope to have the backing of the Greater London Council."

The public inquiry into the proposed development of Stan*sted starts* next month, but is being widened to consider other possible airport developments in the south-east, including Maplin off the Essex coast, and a fifth terminal at Heathrow.

● The expansion of Stansted *Airport would be an* agricultural disaster for East Anglia, the National Farmers' Union has warned.

"If Stansted is allowed to develop into an airport capable of handling 50m passengers a year, some 25,000 areas of land *will be needed for the airport* together with roads, rail link, mineral workings and all the urbanisation which would *follow*," Mr Philip Shaw, secretary of the union's Essex County branch said, commenting on the findings of a report commissioned by the union.

"A huge area of very productive and very adaptable land is at risk, directly contrary to all previous policies for this area and this quality of land."

BA offers Club Class ticket at tourist prices

FINANCIAL TIMES REPORTER

CLUB CLASS travel at tourist prices is British Airways' latest recession-beating *offer to businessmen* travelling to Hong Kong between September 1 and the end of November.

A special £390 one-way fare, which is £75 cheaper than the current Club fare gives passengers full Club service—a more comfortable seat in a separate cabin, higher standards of service and better choice of meals, a hand baggage allowance, free drinks and the flexibility of a full fare ticket.

The fare will rise to only £410 on December 1 and will *continue at that* level into the New Year.

Mr Jim Harris, British Airways Head of UK and Ireland Division commented: "The fare will make our service unbeatable for business passengers.

"Even with full Club Class service, our fare during the first two months will not be a penny *more* expensive than flying tourist class with one of our two rivals."

'Revenge on police' main motive for riot youths

By Lisa Wood

MUCH OF the written evidence *being submitted* to Lord Scarman, who is investigating the underlying causes of the recent disturbances in Britain's *inner cities, has concentrated* on relations between the police and the public.

The National Council for Civil Liberties (NCCL) said: "There is no doubt that many, if not most, of the young people who participated in violence against the police in areas such as Brixton, Toxteth and Highfields (Leicester) did so in a desire to revenge themselves on the police."

It said that measures must be taken, not only to deal with the abuses of power and mistakes of policy which had occurred, but also to rebuild normal policing relationships and to create some confidence between the police and those communities which were fighting them.

The NCCL *maintained* that "normal relationships" would be created only if the police admitted they were partly to blame for the outbreak of violence.

The council said that new efforts had to be made to improve the fabric of inner cities and improve job prospects: "Without such efforts relations between these communities and the police will be unlikely to improve substantially."

Other written evidence being considered by Lord Scarman before he begins the second part of his investigation on September 2 states:

Brixton's "Front Line area", where the rioting began this year, "consists of the ugliest slums in the country, an unpleasant and de-humanizing environment which breeds bitterness, alienation and rebellion," according to the Brixton Neighbourhood Community Association.

Here the majority of inhabitants were black. Riot gear, water hoses and dogs would not *prevent more clashes.*

City analysts differ sharply on economy's state and prospects

BY PETER RIDDELL, ECONOMICS CORRESPONDENT

CITY ANALYSTS have sharply contrasting views about the current state of the economy and the prospects for recovery.

Brokers Hoare Govett argue that the recession ended early this year. During most of the first half of 1981 the statistics have suggested the normal process of transition from retrenchment to recovery.

Activity has edged ahead recently and there will be an accelerated recovery in the second half of this year in response to the relaxation of monetary policy during recent months, the brokers maintaain.

Hoare Govett project by the fourth quarter of this year real Gross Domestic Product will have risen 1.6 per cent above the level of late 1980.

Brokers Grieveson Frant and *Co are slightly more cautious* though they still believe that the official cyclical indicators and second quarter Gross Domestic Product figures support the view that an upturn in economic activity is beginning.

The brokers point to the supporting evidence from bank lending, consumer credit, and a number of business surveys.

In contrast, the latest business forecast from Charterhouse, the investment and banking group, says that UK output will fall by 3 per cent this year, that the squeeze on consumer spending will intensify and unemploy*ment will continue to rise.*

The group's quarterly economic review believes that changes in government policy will be forced as disenchantment with monetary policy grows. Charterhouse *also claims* that it is premature to suggest that the recession has ended since the service sector is likely to be squeezed over the coming year.

Brokers Phillips and Drew *maintain* in their world investment review that it will be difficult for the UK to stage more than a modest recovery in activity over the next 12 months. This is because there will be little help from any revival in *world trade and output, par*ticularly in view of the continued monetary squeeze and high interest rates in the U.S.

The brokers argue that the world rebound from recession seems unlikely to be as pronounced as from the 1974-75 experience.

Rayner 'threat' to women in badly-paid jobs

THE SEGREGATION of women in inferior and poorly paid jobs seems likely to be maintained if *recent proposals to change the* way unemployment benefit is paid are accepted by the Government, according to the Equal Opportunities Commission.

Baroness Lockwood, the commission's chairwoman, has *written* to the Secretaries of State for Employment and Health and Society Security criticising aspects of Sir Derek Rayner's report, "The Payment of Benefits to Unemployed People."

The report proposes that the new criterion of availability for work should be willingness to accept another job on similar terms to the last one.

National Savings contributed £1.5bn in first four months

BY TIM DICKSON

NATIONAL SAVINGS had a comparatively quiet month in July. Figures published yesterday showed net receipts, including accrued interest, of £193.5m. This compares with a net inflow of £290.5m in June, itself a *relatively unexciting result* by the standards set so far in 1981.

National Savings is playing an increasingly important role in financing the public sector borrowing requirement. Including accrued interest, it contributed more than £1.5bn to Government revenues in the first four months of the current financial year.

The Treasury's aim in 1981-82 is to pull in a total of £3½bn, a target which is expected to look much closer once index-linked certificates (still known as Granny bonds) go on sale to everyone from September 7.

National Savings should, as a result, be able to average the £250m a month it now needs to achieve this target. However, *the possibility of introducing the* new savings offer in addition to the North Sea *oil* bonds — which are still expected some time before the end of the year — has not been discounted.

July's results, meanwhile, *suffered from unusually hefty (£35.6m) repayment of matur*ing British Savings Bonds. The National Savings Bank ordinary accounts also saw £15.6m outflow.

The new 21st issue of National Savings Certificates — which *return just over* 9 per cent if held for five years — pulled in £71.2m gross (16.8m net after repayment of other issues). The index-linked version accounted for £107.5m net compared with £94m net in June.

The NSB Investment Account was a little less popular last month, producing £46.9m of net new money against £57.6m in *June.*

Bradford TV plant starts work

BY GUY DE JONQUIERES

A NEWLY-FORMED British company *has started making* television sets at a £2m plant in Bradford. It aims to produce up to 120,000 black and white sets a year and to launch a small colour television next spring.

The company, Network Industries, was set up last May by a group of businessmen with no *previous experience of manu*facturing consumer electronics products. It claims that it can undercut the costs of other British manufacturers by keeping staff levels and overheads down.

*The Network plant, pur*hased with the aid of a £250,000 mortgage from Bradford City Council, began operating last week. It currently employs about 50 production workers and plans to increase the number gradually to 200.

The plant is making a 12-in black and white portable, designed to Network's own specifications. The tube and most of the components are imported from the Far East and the retail price will be less *than £60.*

The company plans to launch a 14-in colour receiver, available in standard and remote control versions, in the first half of next year. It aims to produce about 40,000 sets a year, at a *retail price of about £200 each.*

Marketing will be handled by a sister company, Network Marketing, which plans to distribute the sets through chain stores and independent dealers. The company has been importing black and white sets from Turkey and South Korea.

Mr Barry Goldenberg, a Network director, said that the cost *of producing televisions in* Bradford should be no higher than importing them from Turkey, and that quality and delivery schedules should be better.

Network's production target of 120,000 black and white television sets a year is equivalent to about 10 per cent of the current UK market. If the venture proved a success, the company might expand into other types of consumer electronic products, Mr Goldenberg said.

The first company in the Network group, which is owned by *its founding directors, was set* up in Brighouse, Yorkshire, four years ago. Called Network Electronics, it carried out research and development into technical and scientific components on a contract basis.

More go away for shorter trips abroad

By Lisa Wood

THE NUMBER of Britons going abroad continued to grow last year *despite the recession*, but the average length of stay fell to the lowest number of days for 10 years.

Some 17.5m Britons went abroad in 1980, an increase of 14 per cent, with spending increasing by 31 per cent to £2.7bn. The average length of stay was 13 days.

In contrast, the number of overseas visitors fell slightly, to about 12.4m, a decrease of one per cent on 1979. This was the second successive small *decrease since the record figure* of 12.6m in 1978.

Overseas visitors continued to spend more in the UK than Britons did abroad — *some* £2.9bn — but this was only a six per cent increase on spending in 1979.

The two most popular destinations for Britons going abroad were France and Spain. Americans were still the most frequent visitors to Britain.

Telecom to join 'Europage' directory

AFTER Yellow Pages comes Europages. British Telecom is set to be first off the mark in *Britain* by joining five other EEC nations to produce a 1,100-page commercial telephone directory covering all six countries.

France, Belgium, the Netherlands, West Germany and Italy are the UK's partners in this enterprise, which aims to increase the flow of information to importing and exporting companies.

Europages is planned to make its debut in September, 1982. Six national editions will be printed in the language of each country and each will have a preface, index and a classified section sub-divided into *industries and trades* and then —like Yellow Pages—into particular activities within each sector.

Under any heading of a Europages directory it should be possible to find suppliers of a partciular service in several countries.

Car maker to launch economy sports model

By John Griffiths

TVR, the Blackpool-based specialist car manufacturer, is to *launch an economy*, 2-litre version of its Tasmin sports car at Motorfair in October.

The car is expected to cost less than £10,000, which would make it £3,000-£5,000 cheaper than other models in its range.

TVR is one of the few UK specialist makers to have survived the post-1974 oil crisis and subsequent hefty rises in *fuel prices without major* financial trauma.

Its 100 employees build about seven cars a week and the company has avoided temptations to which other manufacturers have succumbed of expanding output in boom years, only to find themselves over-extended when the volatile sports car market collapses, as it has done *regularly.*

TVR expects to sell about 250 cars in the UK this year, with a small percentage going for export.

Coventry's spending referendum

THE ratepayers of Coventry go to the polls on Thursday in a rates referendum. The city's 237,223 voters will have the opportunity to vote for a substantial increase in rates or a cut in public services.

Although the result is not binding *on* the Labour-controlled council, the outcome of this £90,000 exercise is bound to be keenly watched by other *local authorities throughout* the country.

The result will also be studied with interest by Mr Michael Heseltine, Secretary of State for the Environment, who is considering introducing legislation to make referenda obligatory for councils seeking rate increases above a Government limit.

Coventry, where Lady Godiva once rode naked through the streets to protest at high taxes, faces a Government demand to prune more than £5m from its £107m spending plans this year.

If it fails, Mr Heseltine will almost certainly impose a £3.36m penalty in the rate support grant.

The city's Labour leaders say a £5m cut before the end of this financial year is impracticable. *But if they make no cuts at all,* a supplementary autumn rate would be inevitable and rate bills would rise by about 35 per cent by next April.

So the council has drawn up *a compromise proposal involv*ing about £2m of cuts which would reduce the grants penalty to £2m and produce rate rises next April *roughly* in line with inflation.

The package being put to ratepayers on August 27 would mean a £1.25m cut in education spending with the loss of about 100 teaching posts; a 5p increase in school meal prices; a 20 per cent cut in spending on school books and equipment; and the ending of free school milk.

Further education will also be hit and the council's newspaper for the young unemployed in the city would be scrapped.

UK NEWS – LABOUR

Contenders emerge for Labour post

JOHN LLOYD analyses the search to find a successor to general secretary Ron Hayward.

TWO SENIOR engineering unions' officials are emerging as leading candidates for the post of Labour Party general secretary to succeed Mr Ron Hayward, who retires next May.

One of the two, who has not so far appeared as an aspirant for the post but whose candidacy is seen as particularly strong, is Mr Alex Ferry, general secretary of the Confederation of Shipbuilding and Engineeering Unions.

The other whose name has been mooted over the past month is Mr Bob Wright, assistant general secretary of the Amalgamated Union of Engineering Workers.

Mr Ferry has won widespread respect for his work in building up the influence of the CSEU in recent years. He is certain to get the support of the AUEW in spite of Mr Wright's rival candidacy.

He is also likely to get the support of other centre- and right-led unions, including the General and Municipal Workers, the Boilermakers' Society and the white-collar union Apex, all of whom have representatives on the party's national executive, which chooses the general secretary.

Mr Ferry, who is 50, is a former Glasgow divisional organiser of the AUEW and former chairman of the Strathclyde regional Labour Party.

His supporters believe that he may attract votes, too, from leftist-led unions and other "inside left" NEC members.

His post, and his style, are outside of the main factions in union and party politics, and his merits as an administrator and conciliator are thought sufficient to attract a broad base of support.

He will not finally decide to throw his hat into the ring until after next month's party conference, when attempts by a number of unions and by the Parliamentary Labour Party to swing the political composition of the NEC towards the centre will, if successful, further boost his chances.

However, Mr Wright appears confident of attracting a majority on what will still most likely be a left-dominated NEC.

He is the most senior left-winger remaining in the AUEW's leadership, though he was heavily defeated in his bid for the union's presidency by the incumbent, Mr Terry Duffy, earlier this year.

Mr Wright, who is 61, will have less than four years in the Labour Party post before he would be required to retire. This is seen by some as an advantage, as he could appear as a stopgap candidate at a time when the divisions in the party preclude a consensus on selection for the post.

A third candidate from the unions may be Mr Ron Todd, a senior national officer of the Transport and General Workers' Union.

He is a respected negotiator with Ford and a left-winger, but he has yet to determine whether he will allow his name to go forward. If he does, he could be a more powerful contender for the left vote than Mr Wright.

The union candidates will have an advantage over others because of the need to ensure union support—especially financially—for the party in the period leading up to the next general election.

The party is some £500,000 in debt, and attempts by the Trade Unions for Labour Victory organisation to increase the unions' political levy have run into the problem that the unions themselves are often in financial difficulty.

Other candidates who are expected to emerge are Mr Geoff Bish, the party's research director, who enjoys strong internal backing; Mr David Hughes, the national agent; Ms Joyce Gould, the party's women's officer; and two long-serving Labour journalists, Mr Donald Ross, editor of Labour Weekly and Mr Richard Clements, editor of Tribune.

Acas chairman moves to stop rail dispute flaring up again

BY JOHN LLOYD, LABOUR CORRESPONDENT

MR PAT LOWRY, the chairman of the Advisory, Conciliation and Arbitration Service, last night tried to prevent the possibility of the rail dispute flaring up again, only days after it was settled.

Mr Lowry said: "I strongly urge the parties to resist the temptation to continue the public debate on last week's settlement. They should get down to the private business of carrying to a successful conclusion the negotiations which still have to take place."

Mr Lowry's intervention comes at the start of a week in which the rail unions and British Rail will sit down together in the Railways Staffs Joint Council to attempt to translate the commitments to negotiate on productivity into reality.

It was clear when the settlement was reached on Friday that there was wide scope for possible future disagreement, because of the formal separation of the issues of pay and productivity.

BR agreed to pay the full award of the Railway Staff National Tribunal, or 8 per cent from April and 3 per cent back dated to August, though payment of the last part would be delayed till January.

Mr Cliff Rose, the board member for industrial relations, has since said that if the talks on productivity fail, and further talks at Acas also fail—both of which possibilities he regarded as remote—then the 3 per cent might not be paid, because it could not be afforded.

This conflicts with statements by Mr Ray Buckton, general secretary of the train drivers union Aslef, after the settlement was anounced. Mr Buckton said that the award must be paid in full, and that all the unions had done was agree to talk on productivity.

The unions have agreed to introduce the "open station" concept—which would mean fare collection on trains—but will negotiate on other issues, such as single manning and grade restructuring, up to October 31 or January 1. The agreement does not specify that these negotiations must deliver what BR wants.

However, both Mr Sid Weighell, general secretary of the largest rail union, the National Union of Railwaymen, and Mr Tom Jenkins, general secretary of the white-collar rail union TSSA, have said they believe the negotiations will succeed.

And Mr Rose said yesterday: "The commitment is to reach agreement on changes in working practices to the very tight timetable set out in the understanding."

● The Railway Industry Association, which represents over 50 British companies manufacturing railway equipment, has welcomed the pay settlement between British Rail and the rail unions. Mr George Curry, the association's director, said: "The Government has linked increased investment in British Rail with improved productivity and this settlement clearly opens the way to early approval of several re-equipment programmes proposed by British Rail."

Fight goes on to save Durham pit

A CLASH has developed between the Coal Board and the miners' union over the board's decision to close Houghton Colliery, County Durham, at the end of next month, with the loss of 250 jobs.

A Durham miners' delegate meeting on Saturday decided to call on the union's national executive to continue the fight to save the pit.

A Coal Board spokesman said yesterday: "The appeal procedure has been exhausted and there can be no going back on the decision."

The Board says that coal reserves have been worked out and it would cost £4m to develop a new seam. Operations would take 18 months during which the pit would be idle.

Mr Tom Callan, Durham area secretary of the NUM, said yesterday: "We maintain that the pit could be kept going much more economically than the Coal Board makes out."

Royal Mint seeks 200 redundancies

THE ROYAL MINT wants to cut its workforce of nearly 1,300 at Llantrisant in South Wales by about 200. Management has informed the unions that a 10 per cent cut in the workforce is wanted by next March, with a further 7 per cent cut during the following financial year, production workers and white-collar staff.

The management claims a major cost-cutting effort is needed because of fierce competition from mints in Canada, West Germany and France.

Court acts on Mersey 'blacking'

THE MERSEY DOCKS and Harbour Company has taken out injunctions in the Chancery division of the High Court in Manchester to stop lorry drivers "blacking" vehicles entering or leaving the container terminal in the £50m Royal Seaforth dock at Crosby

The action involved the checking of drivers' credentials to find out whether they had a special "container" stamp issued by an unofficial group in the Transport and General Workers Union.

It brought the terminal to a virtual standstill for a week and led to six container ships being diverted from the Mersey carrying cargo worth £250,000. The dock company claimed it threatened the future of the terminal and the jobs of the men working there.

The injunctions were granted against five people—a full-time union official, the branch chairman, the secretary and two committee members. They have taken legal advice and are expected to contest the injunction in the Manchester Crown Court on Wednesday.

The dock company had given notice that from today 400 dockers working at the terminal would drop back to the minimum £50 rate and await reallocation to other work. The company has decided to defer this action for a further week.

Agreement near in Mersey docks talks

TGWU negotiators on the annual pay award for 3,500 Mersey dockers will meet tomorrow to review the outcome of 17 hours of talks with the port employers last week.

They are then expected to report to a meeting of the 100 Mersey Dock shop stewards on Wednesday before a mass meeting of the men is called later in the week. Agreement is thought to be near on complicated changes in working practices

Pickets out against Continental poultry

East Anglian poultry workers, who are members of the National Union of Agricultural and Allied Workers, will be on picket duty today in protest against imports of Continental poultry. The union claims these have cost 5,000 jobs and put another 20,000 at risk.

Great Yarmouth Docks, where 10 container loads of Dutch chickens enter daily and Ipswich Co-Op retail stores, which sell some of the poltry, will be among targets

BASE LENDING RATES

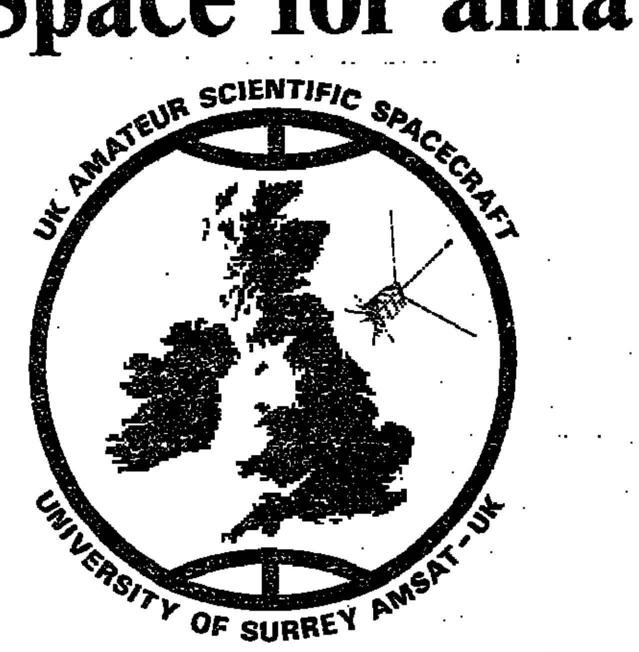
A.B.N. Bank	12 %	■ Guinness Mahon	12 %
Allied Irish Bank	12 %	■ Hambros Bank	12 %
American Express Bk.	12 %	Heritable & Gen. Trust	12 %
Amro Bank	12 %	■ Hill Samuel	§12 %
Henry Ansbacher	12 %	C. Hoare & Co.	†12 %
AP Bank Ltd.	12 %	Hongkong & Shanghai	12 %
■ Arbuthnot Latham	12 %	Knowsley & Co. Ltd.	12½ %
Associates Cap. Corp.	12 %	Langris Trust Ltd.	12 %
Banco de Bilbao	12 %	Lloyds Bank	12 %
BCCI	12 %	Mallinhall Limited	12 %
Bank of Cyprus	12 %	Edward Manson & Co.	13 %
Bank of N.S.W.	12 %	Midland Bank	12 %
Banque Belge Ltd.	12 %	■ Samuel Montagu	12 %
Banque du Rhone et de la Tamise S.A.	12½ %	■ Morgan Grenfell	12 %
Barclays Bank	12 %	National Westminster	12 %
Beneficial Trust Ltd.	13 %	Norwich General Trust	12 %
Bremar Holdings Ltd.	13 %	P. S. Refson & Co.	12 %
Bristol & West Invests.	13 %	Ryl. Bk. Canada (Ldn.)	12 %
Brit. Bank of Mid. East	12 %	Slavenburg's Bank	12 %
■ Brown Shipley	12½ %	E. S. Schwab	13 %
Canada Perm't Trust	13 %	Standard Chartered	‖12 %
Cayzer Ltd.	12 %	Trade Dev. Bank	12 %
Cedar Holdings	12 %	Trustee Savings Bank	12 %
■ Charterhouse Japhet	12 %	TCB Ltd.	12 %
Choulartons	12 %	United Bank of Kuwait	12 %
C. E. Coates	12 %	Whiteaway Laidlaw	12½ %
Consolidated Credits	12 %	Williams & Glyn's	12 %
Co-operative Bank	*12 %	Wintrust Secs. Ltd.	12 %
Corinthian Secs.	12 %	Yorkshire Bank	12 %
The Cyprus Popular Bk.	12 %		
Duncan Lawrie	12 %		
Eagil Trust	12 %		
E. T. Trust Limited	12 %		
First Nat. Fin. Corp.	14 %		
First Nat. Secs. Ltd.	14 %		
Robert Fraser	12 %		
Antony Gibbs	12 %		
Grindlays Bank	‡12 %		

■ Members of the Accepting Houses Committee.
* 7-day deposits 9%, 1-month 9½%. Short term £4,000/12 months 11.85%.
† 7-day deposits on sums of £10,000 and under 9%, up to £50,000 10%, and over £50,000 11%.
‡ Call deposits £1,000 and over 9%.
§ Demand deposits 9½%.
‖ 21-day deposits over £1,000 10½%.

TECHNOLOGY

EDITED BY ALAN CANE

Space for amateurs



BY MAX COMMANDER

AFTER Carl Sagan and his BBC Cosmos series, space enthusiasts might like to make another TV date, a bit nearer our planetary home.

The date is September 22 when UOSAT, the first British educational satellite is due for launch from the Western Test Range at Vandenburg, California. If all goes well the champagne glasses will be clinking in the Department of Electronic and Electrical Engineering at Surrey University in Guildford.

Vacuum

The satellite, designed and built by the department underwent flight acceptance tests covering spinning, freezing and heating in vacuum with British Aerospace at Stevenage before being shipped to the Goddard Space Centre in Maryland.

At Goddard, calibration of a magnetometer experiment will be carried out. This experiment will study the earth's magnetic field and the instruments will be identical to those flown on the Voyager missions to Jupiter and Saturn.

UOSAT is a piggy back job and a trial mating with the Delta 2310 launch vehicle has already been successfully carried out at the McDonnell-Douglas works in California.

UOSAT has been designed for school science groups and radio amateurs. It will be able to transmit data, including pictures of the earth's surface in a form readily displayed on a domestic TV set.

The satellite will carry a voice synthesiser for "speaking" in English and offer information on telemetry, experimental data and spacecraft operation. The information will be receivable by amateur VHF receivers with a simple fixed aerial.

UOSAT is particularly interesting because it differs from previous spacecraft launched by the Radio Amateur Satellite Corporation (the Oscar Series) or by the Soviet Union (RS 1 and 2). These were primarily intended to relay radio signals, thus increasing the VHF and UHF range of transmissions by radio amateurs.

Surrey University says that UOSAT has a different function and is designed to stimulate greater interest in space science in schools and universities. It can also provide radio amateurs with a tool to study the ionosphere through which their transmissions travel.

The satellite will also carry a number of experiments, including beacons transmitting at different frequencies and two particle counters for information on solar activity.

UOSAT will be a secondary payload on the NASA Delta rocket. The main load will be the NASA Solar Mesosphere Explorer. The aim is a polar orbit with a period of 95 minutes at a height of about 530km (330 miles). Expected life before re-entry and burn-up is estimated at four to five years.

An on-board computer based on the RCA 1802 microprocessor will be loaded from the Surrey University Command Station. This can be corrected in flight as required.

Of special interest to schools and colleges will be the earth pointing camera which can cover a 500 by 500 km (300 square miles) area—about equivalent to most of England south of Newcastle or the whole of Scotland.

The image will be formed on a solid state charge coupled device, stored in the spacecraft's computer until transmission to ground—a process of about three to four minutes.

Unlike images from weather satellites the picture will be transmitted in such a way that it can be readily received and stored by a simple receiver and displayed on a domestic TV set.

Inflation

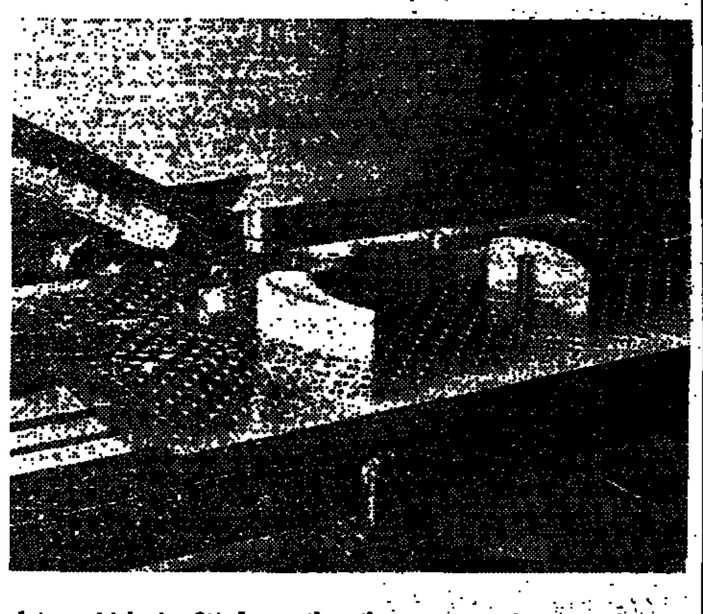
The pictures will have a resolution of about 2 km and will have 16 grey levels. Experimental data in graphic form will also be available by the same link. Full details will be published by the university later in the year but it is expected that receiver kits will be available at about £150.

Surrey University says that inflation has overtaken the original budget and costs are likely to be about £10-£15,000 more than expected. Help or inquiries to 0483 71281.

Dr Martin Sweeting (right), Project Manager, and Steve Greenland, put the finishing touches to UOSAT in the department's clean room.

Prize clamp now in production

A RANGE of clamps for use in industry and for do-it-yourself enthusiasts has been developed by the precision and general engineering company Camclamp.



The small DIY version of the clamp won prizes in national and regional competitions for technical innovation in 1979, but because of delays in getting delivery of the dies for the zinc die-casting production for sale has started only recently.

Camclamp says that the retail stores which have shown interest in the clamp have insisted that the product should be attractively packaged for display to their customers and this has caused delays in the marketing operation.

Accuracy

The operating principle of the clamp derives from the shape of the special cams. In the general engineering version, known as the universal jig and intended to hold any shape of workpiece firmly for machining operations, the cams are located in the holes in the base plate.

These holes must be drilled to a high degree of accuracy both as to size and spacing. The cams can then be readily repositioned to grip the next workpiece.

The clamping effect can be reinforced by applying a second cam to the handle of the first and each cam can be kept firmly in position by the use of a retaining pin. For drilling operations it is a relatively simple matter to prepare a drill guide plate, which is fitted on the shouldered pins provided.

Camclamp claims that tests have shown that its universal jig is more than six times as fast as conventional hand-operated systems. The jig system is supplied in kit form and with the aid of a simple pedestal drill the user can adapt it into a drilling jig to accommodate the most complex workpiece.

This preparatory work can be carried out in a few hours instead of having to wait weeks or months while a conventional jig is being made, says Camclamp. The ability to start on a new order on the day it is received can be especially valuable when the company is competing for sub-contract work.

The simplicity and flexibility of the system enables the operator to avoid creating the scrap often caused by the unnecessarily high tolerances imposed by conventional jigs on unimportant dimensions of the workpiece.

The special shape of the cams, in which the curvature is based on a true spiral, is claimed to ensure that any tendency of the workpiece to move in the direction in which the cam is actuated will force the cam to exert still greater pressure on the workpiece. Camclamp is on 051 480 2777.

Pressure gauge

THE RAPID and accurate measurement of high fluid pressures at oil wellheads or in pipelines is claimed to be possible with a new type of deadweight gauge introduced by the Budenberg Gauge Co. The instrument operates on the normal deadweight principle of balancing the pressure to be measured by loading a known weight on to a piston in a vertical cylinder.

But instead of the lengthy procedure of reaching an exact balance by means of small weight increments it employs an internal source of hydraulic pressure, monitored by a direct-reading dial gauge, to measure the gaps between the main weight steps.

Budenberg claims that the gauge can give an accurate reading within about 10 seconds and can be used to measure changing live pressures at a wellhead or in a pipeline. A distinctive mechanical feature of the gauge is the stepped piston.

The pressure to be measured is applied to the piston base and weights slightly greater are then loaded on to the piston. Supplementary hydraulic pressure generated by a screw pump is applied to the outer anulus until the piston just floats freely in the cylinder while being spun by hand. Budenberg is on 061 928 5441.

Swiss attempt to beat sulphur emission problem

AN AGE-OLD problem caused by the burning of raw coal is the emission of the oxides of sulphur and nitrogen, which are pollutants inimical to all human, animal and plant life.

In an attempt to solve this problem the Swiss company Sulzer Brothers began tests with fluid-bed firing about two years ago. With fluid-bed firing the coal is burnt in a mixture of fine-grain sand, limestone, gypsum and ash particles in a fluidised state at a temperature of 800-900 deg C.

At this temperature the sulphur emitted by the burning coal combines with the limestone so that gypsum is left as the waste product and the production of nitrogen oxide is appreciably reduced.

The Sulzer furnace has one or more turbulent cells into which the combustion air is blown through ports in the bottom of the furnace. This sets the coal-limestone mixture in turbulent motion.

Steam or hot-water pipes immersed in the fluid bed permit the combustion temperature to be kept low and the turbulent motion ensures efficient heat transmission, says Sulzer.

A free space for post-combustion is provided above the fluid bed and from there the flue gases are directed to a downstream heating surface as in a conventional boiler. Sulzer claims that after more than 800 hours of operation the prototype boiler has achieved the expected reduction in pollutant emission. The problem of dust emission has been solved by fitting a textile bag filter.

Patents for catalysts

FOUR new U.S. patents concerning polymerisation catalysts have been assigned to Phillips Petroleum, the company states. The first is a catalyst claimed to be ideally suited for making linear low-density polyethylene.

Another recent Phillips patent claims a new catalyst system capable of greatly improving the yield of high-density polyethylene compared with current commercial catalysts.

A third claims a catalyst for producing easy-flow, high-melt index HDPE for injection moulding, while a fourth patent claims a polymerisation process using the catalyst. All these patents concern catalysts for use in the low-pressures slurry process discovered by Phillips Petroleum in the early 1950s for making polyethylene and other polyolefins.

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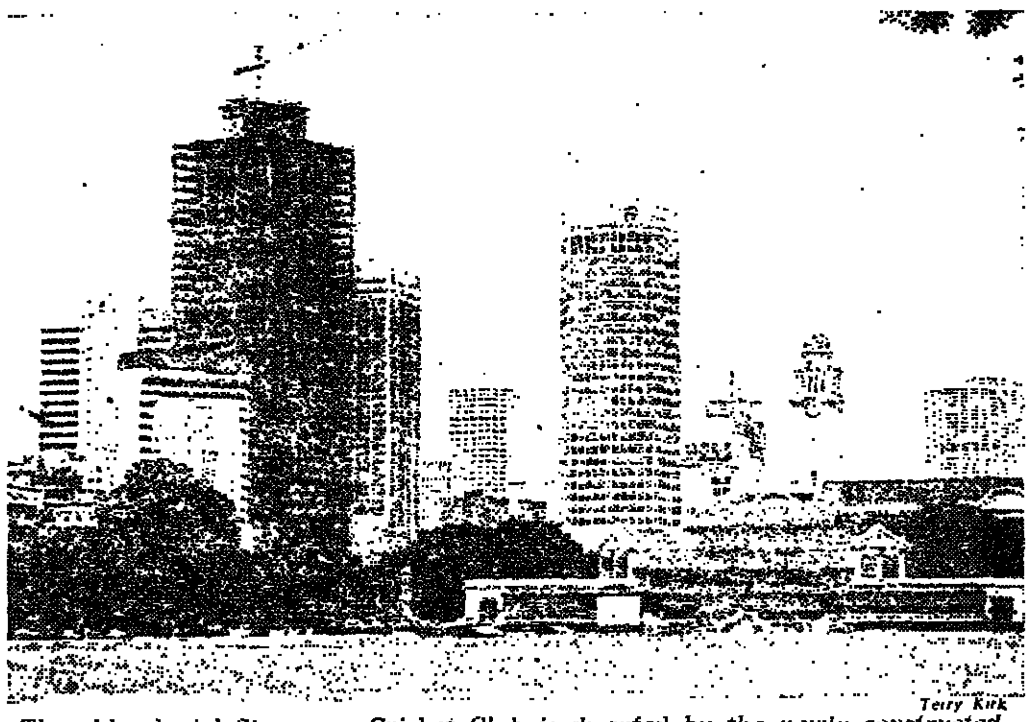
FINANCIAL TIMES SURVEY

Monday August 24 1981

INTERNATIONAL CONSTRUCTION

International contractors and consultants are suffering from the effects of recession in advanced economies and a spending slowdown in developing nations. This pressure has forced many contractors to look elsewhere overseas and to consider small or challenging projects to find the work that is available.



Terry Kirk

The old colonial Singapore Cricket Club is dwarfed by the newly constructed tower blocks of banks in the city's financial area—South-East Asia is one of many areas where the competition for contracts is intense

More countries chase less work

By Michael Cassell

IT WOULD be easy to conclude, given the state of health of the world's principal economies and the slowdown in spending by many of the developing nations, that the international construction industry must by now be on its knees. Nonetheless, both the contractors and the army of consultants which support their activities are nothing if not resourceful and, between them, they have managed to sustain a surprisingly respectable workload.

There is no doubt, however, that the going for international contractors has become extremely tough. World construction markets are suffering from a substantial excess capacity and the now-familiar problems of fierce competition, growing protectionism and political instability have in many regions become still more acute.

In order to maintain order books and construction teams, the contractors have shown an impressive ability to seek out and secure work capable of sustaining their overseas aspirations. They have been prepared to look farther afield than ever before, have taken on contracts which look tiny alongside the *jumbo schemes which at one* stage appeared to become their staple diet and have worked hard to sell those specialist skills which some of their competitors have not yet perfected.

There has never been a time when competition for major construction projects has not been intense but there can have been few periods when *so many countries are competing* for available work.

The first division of European contractors, from the UK, West Germany, Holland, Sweden, France and Italy, together with the Americans, have been joined in their search for work not only by the South Koreans —who in less than a decade have come from nowhere to represent a major force in construction — but by nations such as India, Pakistan, Thailand, the Philippines and Indonesia. Competitive bids for major projects have also emerged from places like New *Zealand, South Africa* and countries of the Eastern bloc.

At the same time, some of the nations which for the past 10 years have provided foreign contractors with a plentiful supply of work have finally reached the point where they find themselves capable of providing for themselves the civil engineering skills which once *had to be imported.*

In the Gulf, for example, several countries now support substantial domestic civil engineering contracting groups which are capable of taking on an extensive range of work and which are, not surprisingly, favoured by the local client — more often than not the state itself.

Larger share

In several regions of the globe, local contracting industries are pressing their governments for a larger share of the work available and their success means that the outside competitor is having to work still harder to obtain business. Many are making capital out of any specialist expertise they can offer and in fields like chemical *engineering, fabrications and* pipework they find themselves ahead of any local rivals.

Although the Middle East construction markets have lost much of the heady dynamism which characterised them during the early 1970s, and which brought contractors from all over the world to build palaces and pre-fabs, the region still ranks at the top of any contracting league table, as recent tendering activity continues to confirm.

Saudi Arabia represents by far the biggest construction market in the region, though it perhaps remains the most difficult to penetrate. Saudi is a nation with mind-boggling expenditure plans but one with an ultra-cautious approach to the matter of choosing foreign contractors. Progress for outsiders is not easily achieved, not least *because of the traditional domination* of the Americans, who have good working relationships and a long history of co-operation with the Saudis.

There are some signs, however, that the British contractors—who have fared well in other Middle East nations—are beginning to make inroads into the Saudi market and one UK consortium is preparing itself to sign contracts for work worth nearly £50m, involving *the provision of two hospitals in* a development programme which has so far been largely dominated by the French.

A team of eight UK contractors is also hoping to prequalify for up to £1.4bn worth of civil engineering work on Iraq's railway system. Their decision to combine forces in an attempt to win the business represents the type of combined approach which has become necessary and which for several nations is now a matter of form rather than an *exceptional measure.*

Within the Middle East, markets like Iraq, Jordan, Libya and Egypt offer good contracting opportunities, though they are widely regarded as "high risk" investment areas and many groups have been wary of committing themselves to extensive operations in these countries. As in all Middle Eastern states, local partners are either an essential requirement or at least a sensible prerequisite to contracting success. *Finding one who remains* unattached must by now be something of a major challenge.

Hong Kong is currently providing a constant supply of construction projects—often in the £1m to £10m range—while places as far flung as Malaysia, Australia, the West Indies and East Africa are also offering contractors a useful and continuing supply of work. A U.S.-UK joint venture has just signed a £150m contract to *improve facilities on the remote* island of Diego Garcia, the American military base where expenditure could ultimately be many times that figure.

Strongest market

In Nigeria, one of the world's strongest construction markets and a place where the prospect of profits seems to overcome a fairly widespread dislike of operating conditions, huge volumes of work are due to be generated by the development of the new federal capital of Abuja. Tenders for £500m worth of construction work have just been returned and contractors from several European nations are hoping to pick up large chunks of business.

South America, long hailed as the location for the next construction boom, has so far proved *slow* in living up to other people's expectations. Work in some nations is plentiful but local contracting forces invariably provide powerful competition and several countries represent the type of "high risk" involvement which acts as a powerful disincentive. Locations like Peru, however, offer enormous potential, and several international contractors are working there in the hope that success in that *country will open up further* work on the continent.

In North America, home of one of the world's most successful international contracting armies, foreign contractors are managing to make significant inroads, both in terms of individual construction projects and their growing representation via the acquisition of American *companies. One major* UK civil engineering group has said it could, within five years, be bigger in America than it is in the UK.

Competition for available construction work around the world seems certain to increase still further in the medium term and it looks as though individual effort will more than ever need *to be replaced by a co-ordinated* approach in which companies or countries combine resources.

It has long been a criticism of UK contractors that the individualism they hold so dear and the *ad hoc* consortium formula adopted for specific schemes will become increasingly less capable of wresting work away from well-organised, powerful and experienced competitors who combine readily and regularly to offer all the technical, manpower and financial resources demanded by big civil engineering projects.

Attempts to establish "lead" *organisations, capable of co-*ordinating such concerted efforts, have been tried in the past and have generally been regarded as a failure, leaving individual companies to cope as best they may — often with comparatively limited resources and little chance of beating the rest of the field.

As a result, the project in hand becomes the extent of their ambition and the ability to consider the sacrifice of short-term profitability

CONTENTS

INTERNATIONAL CONSTRUCTION II

Stiff battle for success

UK contractors

ANDREW TAYLOR

OVERSEAS ORDERS continue to form an important part of the leading British contactors' workloads but UK companies are having to strive to win work in the face of intense international competition.

Nevertheless, British contractors, power engineers, process plant suppliers and design and development consultants can still achieve spectacular successes and have been included in some major contracts won recently.

Earlier this year a British-led consortium—headed by GEC and including Babcock Power—won a contract valued at £550m to supply a complete power station to Hong Kong. The contract with China Light and Power and Eastern Energy, a subsidiary of Exxon the international oil corporation, is thought to be the largest export order ever won by British industry.

Another major contract won this year was by a U.S./UK consortium—in which the British company Mowlem is expected to play a leading part—for £150m of U.S. military installations on the Indian Ocean island of Diego Garcia.

The contract, for the construction of aircraft aprons, deep water wharves and small harbour wharves, could open the door to future U.S. military contracts in the Indian Ocean valued at about £900m.

Mowlem's share of the initial work could be as high as 30 per cent, according to some U.S. sources. Other partners in the joint venture are Raymond International and Brown and Root.

But despite these significant successes UK contractors are finding it tough going in international markets. Competition from other countries is intense, and not just from major construction concerns in industrialised nations — some of which, like their British counterparts, have seen workloads in their own home markets slump.

Mr Bob Erith, construction and building materials analyst with British stockbrokers Savory Milln says: "There are some very good European companies aggressively searching for overseas work. U.S. contractors are also very active, while construction companies from the Far East, notably South Korea, have had a significant impact in markets like the Middle East."

In addition to these countries there are also a number of other nations competing for international construction contracts, says Mr Erith. "Companies from India, Pakistan, Taiwan and Indonesia should not be underrated. Greece, South Africa and New Zealand firms are also in the market."

Only last month the British civil engineer and contractor, Laing—which recently has been enjoying more success in tendering for overseas work—was beaten by Fletcher Construction of New Zealand for a £30m hospital scheme. Lilley, another UK company, also narrowly missed winning a share of an important new £34m Singapore office scheme when it was beaten for a £5m substructure contract by the Japanese Development and Construction Company.

The Middle East remains the biggest single overseas construction market for British companies. Here they have faced particularly intense competition from the South Koreans who, with their cheap labour policy—young people are faced with the choice of military service or joining development teams overseas—are able to substantially undercut the tender prices of their international competitors.

South Korean operators to win major work in the Middle East include: Smaho Construction International which has just won a \$490m (£271.6m) contract to build housing for the National Guard in Saudi Arabia at Al Hassa. It is one of five contracts totalling \$2.18bn let by the National Guard since the end of May this year. The other contractors are Dumez and Societe Auxiliare of France, Pegel Arabia, which is a German-Saudi joint venture, and Mabco of Riyadh.

The involvement of local contractors in major works—like those recently let in Saudi Arabia by the National Guard—is a more recent feature of the Middle East construction market and adds an important new element to the competition Britons face when tendering for jobs.

Nevertheless, UK contractors—although perhaps not featuring so regularly in some of the large prestige contracts—have not been unsuccessful in winning new Middle East work. This month, the Coventry-based developer W. A. Blackburn agreed a deal to build a £19m industrial development of 650,000 sq ft at Port Zayed in Abu Dhabi in the United Arab Emirates.

Laing Projects—part of the John Laing engineering and construction group—was also won an £8.8m contract to build a pharmaceutical factory for Arab Pharmaceutical Manufacturing of Amman. Competition came from international groups, including at least one concern from Poland.

Laing now has more than £100m of work on in Jordan, including completion of the Queen Alia Airport in a deal worth £30m and a £7.5m water pipeline project.

But a major criticism of British contractors is that in tendering for work they often compete against each other rather than make a comprehensive effort to achieve new orders by going forward in a single consortium backed by government guarantees. This may explain why British contractors have not featured as strongly as they might have done in winning some of the more recent very large contracts.

However, one of the biggest British construction consortia ever formed is now understood to be lining up to bid about £1.4bn for railway civil engineering work in Iraq, a move which could establish a pattern for future major overseas contracts.

The consortium headed by Costain is reported to include Taylor Woodrow, Balfour Beatty, Laing, Tarmac, Sir Alfred McAlpine, Fairclough and Wimpey. It is seeking to prequalify for two large railway contracts between Baghdad and Basra and Kirkuk and Haditha. Strong competition is expected from Indian and Brazilian contractors.

Front runners among British companies overseas have been Costain, Taylor Woodrow and Wimpey. Tarmac has had its problems overseas, notably in Nigeria, but is making a determined effort to win new work and is involved in an important power station project in Peru.

In Egypt, Higgs and Hill has picked up one or two contracts as has Cementation of Trafalgar House, which at the end of July held a letter of intent for a major office and residential development in Cairo thought to be worth about £11m. Cementation also has work in Ghana and is understood to be bidding for £22.5m hotel scheme in Sri Lanka.

Elsewhere, J. B. Holdings has work in the West Indies as does Higgs and Hill while Keir International, part of French Kier group, recently won an £11m road contract in Malawi.

International contracting is fraught with risks, particularly when operating in countries which are politically highly volatile, as contractors such as Tarmac operating in Nigeria and Bath Portland and Laing in Iran found to their cost.

More recently, Cementation has run into problems with its contract for the £50m Polish Airline Terminal building in Warsaw where construction is understood to have halted for the time being at least.

Nevertheless, the British have a good track record in overseas development and there have been few disasters, with the desire to win worthwhile overseas contracts tempered by an understandable caution. Some of the recent contracts won by international competitors have been taken at very low margins and the risk is very great.

Nigeria is another growth market where the British have been an increasing force recently. Taylor Woodrow has been among leading British firms to recently announce major contracts. Currently more than half of Taylor Woodrow's £183m overseas order books reflects its recent expansion into the Nigerian market.

But with recent political unrest in some parts of the country and concern over the effect of oil prices on Nigeria's economy, some UK contractors still remain wary about Nigerian prospects.

Australia, with its vast energy reserves and mineral wealth, looks like being an extremely attractive market and one which Costain with its existing interests in that country looks well placed to exploit. The building boom in the U.S. is also attracting British contractors, many of which also have strong commercial property investment portfolios.

For the future the international market looks like continuing to provide good opportunities for work, but competition is not likely to ease and the risks will remain high.

Demand for professional service

Consulting engineers

MICHAEL CASSELL

THE ROLE of the consulting engineer on the international construction scene has become progressively more important in recent years.

A combination of factors have meant that there is an increasing demand for the services provided by the consultant and his part in the construction process has been fully accepted and appreciated by the contractor and by the client involved.

As major construction projects have become larger and more complicated, so the team of administrators, managers and technically qualified professional people needed has steadily expanded. At the same time, construction techniques require a great deal of scientific and technological competence to plan, monitor, control and operate projects successfully. In addition, building services have advanced to a point where their provision can invariably represent one of the major costs in any civil engineering project.

These trends have inevitably enhanced the central advisory role of the engineering consultant, who has to offer a comprehensive professional service on every type and size of construction scheme. In addition to designing all or part of any particular scheme, consultants' services can include initial evaluation of a project, provision of a feasibility study, handling of tenders, advice on the selection of the eventual contractor, supervision of the project once it is under way, advice on payments and overall advice on management of the project when it is completed.

The consultant is usually paid for his services on the basis of a diminishing proportion of the project cost, calculated on the basis of an agreed scale (which, in the case of UK consultants, has just been revised). The fee, however, represents a relatively small proportion of the cost element of most projects.

Perhaps the single most important characteristic of the consultant, however, is his impartial advice to the client. Indeed, it has long been a criticism of the UK consultant, in particular, that in his endeavours to maintain a deputation for unbending impartiality he has gone so far as to discriminate against British suppliers or contractors.

No doubt there have been occasions when this has happened but, as various reports have pointed out, the widespread reputation and influence of British consultants has also helped engender a climate in which UK techniques, design concepts and products have often been preferred.

Allegations of wasted potential contained within the UK's nationalised sectors have also been pinpointed in official investigations into the UK's overseas contracting effort. The view is that enormous advisory resources—based on long and extensive domestic experience—could be tapped and put to good use in generating foreign earnings if only the public sector undertakings were given a wider opportunity to assist in exporting their consultancy services.

A survey in the UK has shown that tenders by contractors are more likely to be successful when the consultant is of the same nationality. On that basis, there have been repeated calls for major public sector operations to promote more fully their design resources and operational expertise.

Ways in which public sector consultancy could promote exports by UK suppliers include the provision of market intelligence, sponsorship of seminars for overseas clients to show what services are on offer, and deployment of operational, training and testing facilities in support of overseas tenders by UK companies.

The emergence of the public sector in an overseas consultancy role may not be universally welcomed by the UK army of private sector consultants who regard foreign business as a vital part of their operations and who have managed to notch up substantial and continuing successes overseas.

More than half the earnings of British consultants derive from foreign markets and in 1980 members of the Association of Consulting Engineers had no less than £40bn of work in hand. Earnings, in the shape of fees, now run into hundreds of millions of pounds, ranking the consultants' contribution to the country's invisible export earnings alongside those of other service sectors, such as banking and insurance.

Much of the export growth in this area has taken place at the same time as the decline in business in the UK market and has consequently saved the consultant from having to reduce the size of his operations.

However, the problem now confronting UK consultancies is the steady erosion of the domestic base, which has a direct bearing on their ability to embark on and sustain the expensive and higher-risk business of working overseas.

The big reduction in construction activity within the UK has caused problems enough but at the same time the private consultants have faced increasing competition from construction companies offering "turnkey" or "package" deals on a project management basis. At the same time, in-house consultancies employed by the public sector have been taking a growing share of the workload available and have been handling the type of work which has traditionally been the preserve of the private sector.

Private consultants claim to have several distinct advantages over their public sector competitors, not least a broader range of experience and the ability to organise multi-discipline teams to meet the exact requirements of specific projects.

The outlook, however, indicates that the going could become increasingly tough for the private consultancy. At home, the trend towards further encroachment by the public sector seems likely to continue while, overseas, a growing number of nations are developing and forcefully promoting their own consultancy services—often involving the type of co-ordinated, national approach which is becoming increasingly vital.

Overseas funding needs top priority

IT IS axiomatic that no contractor can operate successfully unless there is adequate financial backing. The contractor needs to devote as much attention to arranging adequate funding for a project as he does surveying the site and deciding on his engineering requirements.

The question of funding is even more important for the contractor operating overseas and here conditions are anything but straightforward. The growing political uncertainties and tough competition mean that funding arrangements are going to be complex. The lenders, to protect their money, are going to hedge the contract with restrictions that contractors feel hampers them in tendering and carrying out their projects.

The traditional source of funds has always been the banks. But in this respect contractors feel that the banks are not keeping abreast of modern requirements.

UK contractors are having to expand into markets in which they have not previously operated to compensate for the loss of business in their traditional markets. Such activity is costly and usually unprofitable in the initial stages. Contractors need flexibility in their funding arrangements to meet these new situations and their complaint is that such flexibility is not forthcoming from the banks.

In particular, development projects are becoming more complex and require longer term financing than the banks have usually provided. Bankers need to understand the technological requirements in order to understand the problems facing contractors.

On the banking side, the political uncertainties and the general background against which contractors operate justifies the banks in taking a cautious view of the situation and protecting their investment. It would be more satisfactory if bankers joined more closely in the negotiations, a feature that contractors have been urging for some time.

In recent years, however, the authorities are becoming more involved in the financing arrangements of overseas projects and awareness grows in Government circles for a need to provide backing to contractors beyond that provided by the banks.

The Department of Trade last year created a new projects and export policy division to coordinate the support provided by Government for industry involved in capital projects overseas. One of the services offered is the Overseas Project fund, designed to provide backing for major and difficult project contracts.

Financing

ERIC SHORT

Such a fund can provide up to 50 per cent of the expenses incurred in pursuing these difficult contracts. In order to *qualify for such help, the project* must offer a minimum of £20m UK content relating to goods and services, with the emphasis on the goods supplied. This assistance recognised the trend towards consortium business, with UK contractors combining with overseas companies.

Similar assistance can be provided for consultancy or project management contracts, in which case the minimum UK involvement must be £1m.

Another scheme available to contractors from the Govern*ment is the aid-and-trade* scheme, which provides assistance to British companies seeking to secure overseas orders in developing countries. This scheme aims to provide finance in countries not normally covered by the UK's aid programmes or where the aid allo*cation* has already been committed.

The UK Government offers aid and trade provision funds direct to the authorities in the developing country concerned, on condition that the relevant contract is offered to a British company. The scheme is avail*able to all UK companies* providing goods or capital services.

Another source of financing from the authorities comes through the Export Credits Guarantee Department (ECGD), a UK Government department designed to help exporters by providing a variety of insurances and financial guarantees.

The ECGD has special arrangements for contractors operating overseas. It aims to cover the financial loss should the contract run into problems from delay or default in payment by the overseas government or supplier. However, no cover is available against failure by the overseas buyer to take up the goods.

However, under ECGD arrangements, the maximum *cover given* is limited to 90 per cent of the financial risk. The contractor still has to bear at least 10 per cent and this exposure can often be an onerous burden, especially with contract values continually rising. Further, there is an inevitable time lag in settling *a claim*, during which the contractor can come under considerable financial pressure.

Contract profile: Tarmac in Peru

A breathtaking challenge

TWELVE THOUSAND feet up in the Peruvian Andes, a game of table tennis at the Achoma workers' camp rapidly induces a painful shortage of breath as well as a healthy respect for those better acclimatised to the altitude.

However, a contest in such rarified surroundings against opponents who regard the shifting of 10m cubic metres of rock and soil as a more worthy challenge to their skills is unlikely to prove any more breathtaking than the scale of the civil engineering assault now being mounted by the camp's residents.

The Majes irrigation scheme, which rouses the labour force from bed at first light and sends them home after dark, has brought together six nations in a bid to convert 150,000 acres of dead pampas into arable land, ultimately capable of generating and sustaining ¼m new jobs.

In a country where the rate of unemployment (as high as 55 per cent in some regions) is *beaten only by the pace of infla*tion (60 per cent), the plan has fired the imaginations of millions of Peruvians and won the support of a President who, after nearly 12 years of military rule, is trying to restore the nation's economy and self-confidence.

*For the contracting consor*tium involved, which includes Tarmac from the UK and companies from Sweden, South Africa, Spain and Canada, one of South America's most ambitious construction schemes is providing $650m worth of work and holds out the chance of contracts worth three times that figure.

The irrigation scheme initially entails the construction of 133 km of tunnels and canals through some of the continent's wildest terrain to divert precious waters up on to Peru's coastal plain and out of the 6,000-ft-deep canyons through which they flow on their way to the Pacific.

Later stages envisage trapping some of the tributary waters of the Amazon and sending them west instead of east, through a hydro-electric power *scheme which would provide* Peru with badly needed electricity and extend the irrigation network.

The five-nation team, supervised by the Peruvians, signed the contract in 1974 and it was envisaged that work on the first phase of the scheme, which has meant the creation of 4,000 jobs, would be complete within five years. But a succession of technical problems—including collapsing tunnels, rock conditions which ended in hand-digging marathons and unexpected torrents of water—helped turned the original time-scale into a bad joke. The five-year programme for phase 1 has stretched to ten.

There were early delays caused by lack of access roads and a slow land acquisition programme—both the Government's responsibility.

Finance for the scheme was negotiated in each of the five partner countries, with Hambros Bank in London co-ordinating all loan matters. The original foreign loans, for spending on plant, goods and services in the individual countries concerned, were supplemented in early 1977 and, as the contract dragged on, topped up again in 1980 so that work could be completed.

The Peruvians have throughout been responsible for financing all local costs, however, and *it is in this respect that* problems have arisen. With the changeover last July from military rule to a civilian Government, the consortium saw a single-minded client replaced by one which faces widely conflicting though equally justifiable demands on available resources. *The resulting* indecision has left more than a few civil engineers with bitten nails.

The scope for further foreign loans to help ease the situation appears to have been largely exhausted and the Government must now find the remaining finance if the scheme is not to end in ingnominious failure. The chances must be that the money will be forthcoming as the abandonment of such a potentially rewarding project—though not universally popular because of its enormous expense and regional bias—would create a political earthquake to match any which have rocked the Andes.

While professional pride has maintained a determination within the consortium to finish the job, it is at least comforted by the thought that it would not itself faced financial failure if the worst happened. The contractors who, in the early summer, faced another test of nerves while the Peruvian Government agonised over the latest payment are safe from the ravages of inflation by working on a cost-plus basis and could walk away *without* loss from a project which has been providing very useful profits.

Few contractors could be more determined than Tarmac, which has experienced the full horrors of overseas civil engineering catastrophes (a £16m loss handed on via the acquisition of Holland Hannen and Cubitts) and has, as a result, reversed its old approach to overseas contracting.

Under Mr Eric Pountain, who emerged in 1979 as chief executive from a purge of top management, the group has adopted a much more selective approach to international contracting work. A network of permanent local offices, guaranteeing high overheads but not much else, has been disbanded and Tarmac is now only prepared to work on a project-by-project basis in locations like the Gulf States, which one provided it with a staple diet of overseas contracts.

Last year, the group's international division, which accounted for £65m of the £884m group turnover, recorded a small loss, and shortly before Mr Pountain and some of his senior colleagues were leaving for an inspection tour of the Majes project, it was announced that Mr Jack Codd, head of the badly performing international operation, was leaving Tarmac.

According to Mr Pountain: "International contracting has undergone a revolution in a very short space of time and every step overseas has to be even more carefully thought out than before. The big-spending nations have cut back and *margins have been whittled* away to the point where they can become non-existent.

"Tarmac for one will not contemplate maintaining costly overseas bases in the hope that we might manage to win a proportion of whatever work becomes available. We are, however, ready to spot good opportunities, make a play for the job, complete it and, in the absence of more immediate business, move on somewhere else."

The first phase of Majes should, finances willing, be complete by 1984. But Tarmac hopes that its "travelling caravan" approach will not be necessary in Peru, where new contracts running into hundreds of millions of dollars are due to be let and in which the group believes it can play a profitable part.

Michael Cassell

High sterling creates a fall in exports

IN THE light of world downturn in construction activity and the high level of sterling parities until at least the end of last year, it is not surprising to find that UK exports of construction materials and components have been falling in real terms.

Statistics released by the Department of the Environment show that the value of exports rose from £1.15bn to £1.24bn between 1978 and 1980—but in terms of 1975 price levels their real value fell from £747.32m to £635.49m. The figures are somewhat misleading since some of the most important sectors, structural iron and steel, for example, comprise a very wide range of materials and uses—with applications in *other industries. Nor does the* Department break down its statistics by destination and it is difficult to say precisely which countries are gaining or declining in terms of export sales.

Mr Anthony Davies, director *and secretary of the Building* Materials Export Group (BMEG), believes that the cycle of exports into a new market generally follows a discernible pattern. A developing country typically devotes its initial capital investment to construction and gives high priority to the development of a local building materials manufacturing base, centred basically on products such as concrete, paint, galvanised sheet steel and the assembly of aluminium windows. Local manufacture gradually attains a higher technical base and the host country *can progessively raise the* sophistication of its import requirement. It usually means that exporters of basic building materials and products are obliged to enter local joint ventures to hold onto markets.

As far it can guess—and it *believes its estimate* is reliably accurate—BMEG says that Saudi Arabia remains the top buyer of UK goods, possibly taking about £120m of UK building product exports annually.

Saudi has already gone a fair way along the road to the increased sophistication of its materials requirement. This, while forcing basic product exporters to seek local partnerships, is allowing high technology groups into the area in increasing numbers.

Despite the lack of export numbers defined by destination, *BMEG believes that Iraq is* quickly establishing itself—backed by its continued adherence to British building standards—as the second most important construction market for UK exporters.

Materials and plant

RAY MAUGHAN

The United Arab Emirates and Kuwait, as far as the trade association can determine from its members, have probably stabilised their import requirement—or allowed it to fall slightly. Nigeria, as one of the world's major oil exporters, remains a vital export area but the short-term outlook has become less favourable in the wake of Opec crude oil price cuts.

Other areas such as Venezuela and other Latin American countries, although potentially very *attractive because of oil* revenues, contain fierce competition, not least from manufacturers in Brazil and South America's powerful northern neighbour.

In some instances BMEG has been frankly disappointed by the response to what, on the face of it, are very bright opportunities. Algeria, for example, is in the first year of a five-year development programme designed to commit some £2.1bn annually to construction. British companies, Mr. Davies says, have only a *very small slice of this market* and, while acknowledging the high cost of exporting to a country which precludes any chain of distributors or agents, claims that in its search for the five companies prepared to commit the £15,000 apiece to promote a sales mission, BMEG found only two ready takers.

But an example of how opportunities are being recognised—and where BMEG has been able to prepare a thorough analysis of the numbers involved—is Indonesia, where the total value of construction output is projected to double during the five years of its development plan (Repelita III) to around $5bn annually by 1984.

The UK is not particularly well established in the market as a whole. In 1979, for example, British goods were worth just 3 per cent of Indonesia's imports while the U.S. took 15 per cent and Japan 29 per cent. Yet the value of British goods in most classifications of building materials and products grew quite quickly between 1979 and 1980 (the 112 per cent expansion in the *value of sanitary and plumbing* products and fittings was a good example), but the Netherlands is maintaining its traditional presence. Big Far East competition is well to the fore and, from a very small base indeed, the People's Republic of China is starting to make inroads into certain product areas.

Limits on foreign projects

China

KEVIN RAFFERTY

CHINA, at first glance, should offer one of the best prospects in the world for construction projects. Even though spending on its ambitious four modernisations has been cut back, the country badly needs new projects: in energy programmes, in basic infrastructure like ports and railways and in industrial ventures of all sorts. The new rulers in Peking are doing their best to encourage new processes and procedures, like the special Economic Zones in the south of the country, which will aid China's push into the 20th century.

On closer examination, however, China's opportunities for foreign construction companies are sharply limited. Anyone seeking to do business there has to have done his homework thoroughly, to know that he has a skill that the Chinese are badly lacking, and then to be prepared to be patient in dealing with bureaucracy.

One obvious constraint on Chinese enthusiasm for foreign projects is a shortage of foreign exchange. With a trade deficit predicted by economists for this year Peking is looking closely for schemes that either have the smallest foreign exchange content or that will actually earn hard currency for China.

It is no surprise that the places which are humming hardest with building activity are in the Special Economic Zones next door to Hong Kong. Here property and factories are going up rapidly and it is easier to cut through the bureaucratic red tape which China has in plenty—though some foreign investors even say that it is not so easy even in the Shenzhen Special Zone.

The next lesson for a foreign construction company is not to expect to import teams of workers. A casual glance at any Chinese city will show that China long ago mastered basic building skills, and somewhat beyond, and has plenty of workers to do the job. Hong Kong based companies building in Guandong province complain that the labour is frequently slow, however, because there has been such an explosion of projects that labourers have been plucked literally straight from the fields.

In one house-building scheme the contractor was shocked to find that the Chinese expected to finish the work in two and a half years whereas the maximum he had allowed was 18 months. He solved, or hopes he is on the way to solving the problem by building by slip-and-form method, that is, building first and putting the floors and ceilings in later.

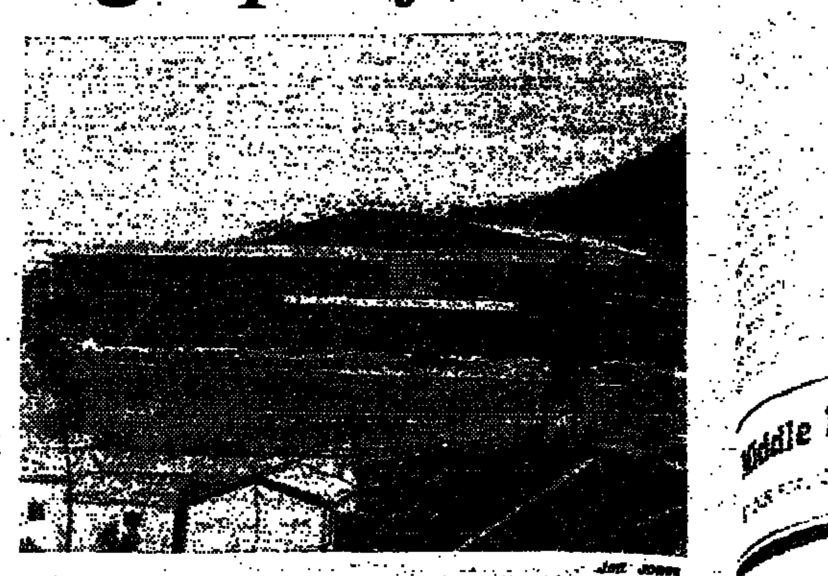
Some of the construction companies have had problems in finding interpreters they can rely on to transmit instructions properly, which is another reason for cutting down on the numbers of non-Chinese speaking staff and also explains why Hong Kong has an advantage, especially in the Cantonese-speaking south.

However, China still needs foreign assistance in the higher skills of building techniques and in specialist design. Strange as it may seem, this can mean opportunities in simple areas like hotels and house-building. China seems keen to attract tourists whom it sees as a ready provider of foreign exchange, yet it lacks hotels. It is also still learning what facilities and what design will cater for the needs of foreign visitors especially those from the west.

Housing construction has proved popular in the areas adjoining Hong Kong. The idea is that homes are built and then sold — for foreign exchange—to overseas Chinese and to companies. There has been something of a hiccup in the market while potential investors wait to see how the new laws affecting the Special Economic Zones are formulated. If things are satisfactory, there may well be a surge of interest and more demand for foreign help in working out the kind of design and construction which will make them sell successfully.

Outside the special regions connected to Hong Kong, it seems likely that the very big projects, such as steel mills and power stations, will be wrapped up with construction advisers as part of whichever national team wins the contract.

China urgently needs to improve facilities in the more general areas of communications and infrastructure, especially roads and ports. Such improvement will be essential if China hopes to boost exports to pay for its increased imports and, indeed, if it hopes to smooth the import trade without blocking the ports, which are nowhere in the same league as Hong Kong in terms of natural location or facilities for handling goods. Again, China has its own expertise except in modern areas involving mechanisation.



Jeff Jones

China continues to need foreign skills to help build its houses and hotels—such as this hotel under construction in the province of Kwantung

China is also particularly deficient in schemes for improving power and fuel supplies. For example, the country has the world's third largest reserves of coal, but it will never approach its target to double production from the 620m tons of last year by the mid-1980s. Even with new investment in mines and supporting infrastructure, it will be years before China can haul coal production levels up to that target.

Anyone dealing with China has to be prepared for hard bargaining and to exercise patience. Hong Kong operators which have local Chinese on their staff have a head start in many negotiations. Sir Lawrence Kadoorie, the chairman of China Light and Power which has signed a joint feasibility study for China's first nuclear power plant, tells an amusing story of how he first became involved, almost casually, in China's nuclear ventures.

An American engineer, checking on his world map to see where there might be nuclear opportunities, chanced on China, so he sent a letter off to Mao Zedong in Peking. Three years later, when the letter had worked its way through the bureaucracy, the American was off to Peking and called in on Sir Lawrence on the way. Sir Lawrence adds how, in the negotiations for the study, every sentence and word, every Chinese character, were carefully gone over.

Anyone looking at China and the construction industry has to worry about the coming Chinese competitor. China has formed a construction company in Hong Kong, which hopes to use local labour, to win some of the big development building jobs. Even if it only gets a share in Hong Kong buildings for the mainland Chinese it will be doing good business.

The Chinese are more ambitious than that. Peking is belatedly trying to emulate other Third World countries in sending its own construction teams and workers abroad. In the past few years more than a dozen state-controlled companies have been formed offering engineers, architects and skilled and semi-skilled workers for overseas work, especially railways, bridges and airports.

China already has a track record with its building of the Tanzam railway and of the long and high Karakoram Highway linking Pakistan, Kashmir and China across the roof of the world. Recently, the country won a $50m deal to build houses in Jordan.

The workers are mostly skilled technicians, according to Chinese officials, "not coolies." At the moment, China has about 2,000 workers abroad, a figure which should go up to 5,000 by the end of the year.

Seeing opportunities and foreign exchange earnings, China is hungry for more projects. Officials declare that they have up to 50,000 workers they could spare for lucrative overseas construction.

Enjoying a development boom

Nigeria

IAN RODGER

BOOM CONDITIONS have returned to the construction industry in Nigeria as the civilian Government under President Shehu Shabari presses ahead with its huge £68bn five-year development plan to 1985.

Vast amounts of this oil-producing country's revenues have been allocated to agricultural projects (£8.9bn), industrial projects (£5.3bn), defence (£6.1bn) and housing (£2.25bn) and already a steady flow of new contracts has developed.

Two mammoth projects stand out. The £7bn scheme to create a new national capital at Abuja in the centre of the country is now well under way and £2.1bn is expected to be spent in the current development plan period. Also, the £2.6bn integrated steelworks project at Ajaokuta in Kwara State is finally progressing, although it is running well behind schedule.

Meanwhile, contractors are enjoying a regular and growing flow of civil engineering work elsewhere in the country. Taylor Woodrow of Britain, for example, won three contracts early this year worth a total of £58m; one being for an irrigation scheme, another for a highway and the other for putting in roads and other services for an industrial estate.

The construction of a new federal capital at Abuja, which happens to be the exact geographical centre of Nigeria, is one of the most ambitious projects ever undertaken in the country. The master plan, prepared by International Planning Associates of the U.S., was approved in 1979 and it was envisaged to have a population of 1.6m by the year 2000.

Milton Keynes Development Corporation then drew up the plans for the first phase of development which would see the construction of most major government buildings. It also made the specific plans for the first two districts, the Accelerated district and the North-West district, which together would house 230,000 people.

Many of the major contracts for the first phase have already been let. Dumez of France is building the international airport, B. Batignole of France is building the dam and water treatment works and other groups are building expressways and housing.

Contracts for the £400m National Assembly and Senate building, the High Court building and the £90m presidential palace were out for tender at the time of writing.

The Government wants the first phase to be completed by late 1982 so that it can administer the 1983 federal elections from Abuja. However, most industry officials feel it is impossible to keep to this timetable and that there is also the likelihood of shortages of key materials, such as cement, if the breakneck pace continues.

Meanwhile, the £2.6bn integrated steel project at Ajaokuta continues to progress. The Russian company, Tiajpromexport, was given the main contract in 1979 by the then military Government. The civilian Government, which took over in the autumn of 1979, was said to be suspicious of the Russians and the project was delayed for several months.

Contracts associated with Ajaokuta that have been let include the development of Port Onne, 25 km south of Port Harcourt. Royal Volker Stevin of the Netherlands is building what will be Nigeria's deepest sea port with over 50 berths capable of handling bulk cargo of over 50 to 60,000 tonnes capacity for the import of coking coal and iron ore for Ajaokuta.

The French Government-supported railway engineering group, Sofrerail, won the contract early this year to make initial studies, prepare bids and supervise the construction of the 680 km line between Port Harcourt and Oturkpo, in the central part of the country. Tenders are now being considered for six sections of the line, two of which are for a spur line to Ajaokuta.

British construction companies still fare rather poorly in Nigeria. Taylor Woodrow and Scott Wilson Kirkpatrick have landed some large contracts but French and German companies continue to make most of the running.

British companies have suffered from the legacies of the colonial period and the civil war. The most recent manifestation of this albatross was an embargo imposed in June, 1979, against British companies tendering for federal contracts.

The embargo was one of a number of measures the Nigerian Government had used to put pressure on the British Government not to reeognise the transitional government in what was then Rhodesia. It was never announced publicly and was applied selectively until its removal in last autumn, but its effect was demoralising for British companies and meant they were late in getting organised to tender for the big projects now under way.

Recently, however, there have been a number of indications of growing enthusiasm for Nigeria, the most important of which is a major trade and investment mission from Britain to Nigeria planned for October and sponsored by the Nigerian-British Chamber of Commerce.

The 24 places on the mission were quickly snapped up and the Chamber has had to turn away 20 additional applicants with the promise to hold another mission next year.

A steady outflow of contracts but no easy profits

Middle East

BY OUR FOREIGN STAFF

THE DAYS of heady, breakneck growth in the Middle East that followed the 1973-74 price explosion now seem far in the distant past.

Business, however, has not contracted in the manner predicted three years or so ago. On the contrary, the region seems set to generate contracts for the indefinite future on a scale indicated by the crop of ambitious development plans unveiled over the past 12 months or so. The pause, even stagnation, evident in 1978-79, was caused as much by the need to restrain inflation and minimise the disruptive effects of too rapid growth as by the fall in the real values of oil revenues, the life-blood of the region.

Beyond that proposition it is difficult to generalise. At one extreme the region includes two spectacularly big spenders, Saudi Arabia and Iraq at the other, countries desperate for foreign exchange, like Sudan, which are desperately dependent on the oil-producing states for balance of payments requirements, let alone development needs.

Some idea of the overall predominance of Saudi Arabia and Iraq in terms of expenditure can be seen from the contracts awarded in 1980 recorded and analysed by the *Middle East Economic Digest.*

Last year, out of a total value of $46.26bn, Saudi Arabia accounted for $15.70bn, or 33.9 per cent and Iraq for $12.64bn, or 27.3 per cent. The other significant markets were Kuwait, with contracts awarded worth $3.52bn (7.6 per cent), Libya $3.45bn (7.5 per cent), the United Arab Emirates $1.72bn (3.7 per cent) and Egypt $1.70bn (3.7 per cent).

The Saudi Government has projected development expenditure at SR 701.7bn ($205bn) during the period of its Third Five-Year Plan covering the 1975-80 period. That figure excludes not only the considerable continuing programme of military infrastructure, including the three garrison cities being built at Tabuk, Khamis Mushayt and Hafr al Batin but also private sector projects. The total value of construction work in the civilian field has been estimated at SR 440bn, at constant 1979-80 prices.

The scale of Saudi spending has been highlighted by such projects at the King Abdul-Aziz International Airport near Jeddah, completed earlier this year at a cost well over $5bn, and the parallel project for Riyadh which may prove almost as expensive. The value for the contract won by Blount of the U.S. and Bouygues of France for the campus of Riyadh University was $1.7bn.

The main focus will be on the industrial infrastructure at Jubail, together with the continued enhancement and expansion of the capital Riyadh. From the start the policy of the Royal Commission responsible for the two heavy industrial centres has been to favour Saudi contractors and joint ventures where possible. Since the beginning of 1980 roads and bridges have been the exclusive preserve of the locally owned industry.

A multiplicity of opportunities will exist for foreign contractors, nevertheless, but with contract terms still stiff and competition intense there will be no easy profits.

Iraq's development has been spurred on rather than held back by the war with Iran and unaffected by the cut in oil exports to a level only one-third what it was before hostilities broke out. The value of construction work in progress is said to be nearly ID 2,500m (over $8bn). It seems set to rise if the official estimate of minimum state expenditure of ID 40bn ($133bn) in the 1981-85 planning period proves anything like correct. This year the budget is up 28 per cent to $1bn.

Superficial attention, again, is caught by the big projects like the $800m Baghdad port and Mosul dam for which the $1.5bn contract was awarded to a West German-Italian consortium earlier this year. However, the main feature of the development programme is its diversity, and the speed of implementation insisted upon.

Iraq is the main growth area in the region and as a market seems likely to become bigger than Saudi Arabia in the near future. Transportation is a high priority with the north-south expressway linking the western border with Kuwait and another to Turkey and new railways linking Baghdad with both Mosul and the Gulf taking pride of place. A considerable investment is planned also in telephones, electricity, housing, water and cement capacity, not to mention larger industrial projects.

Quite apart from its investment in the petroleum sector, particularly refineries, Kuwait is set to spend at a surprisingly high rate for a state so long accustomed to financial surpluses. It is faced with the continuing need both to expand and improve its infrastructure, while also commissioning plant to satisfy an ever-increasing rate of consumption of electricity and water. Thus, it is planning ahead to the end of the decade with the construction of another massive power complex together with associated water desalination facilities.

Outside these spheres there are the big schemes for urban renewal, better amenities and the enhancement of life generally approved or being finalised.

The state, meanwhile, is still doing its citizens a disservice by almost invariably taking the lowest bid, with the result that many international contractors are as shy as ever of tendering in a very tight market.

At 18.5bn dinars ($62.47bn) total allocations under Libya's 1981-85 plan are twice those of its predecessor. The main areas of concentration are industry and agriculture but substantial investment is being made in roads, ports, a railway line from Tripoli to Tunisia, electricity, telecommunications, housing and schools. Libyan bureaucracy, contract terms and tax regulations have been such as to deter many international companies. The commitment to development is such, however, that the maverick foreign policy of the regime, has not in itself materially affected operations of Western companies.

In the United Arab Emirates the bulk of state investment—or, more specifically, that of the Abu Dhabi National Oil Company which is in the early stages of a five-year $10.3bn programme—is directed towards the hydrocarbon sector. The UAE's First Five-Year Plan projects spending of rather more than $3.7bn. Public housing and educational facilities are to figure prominently in it.

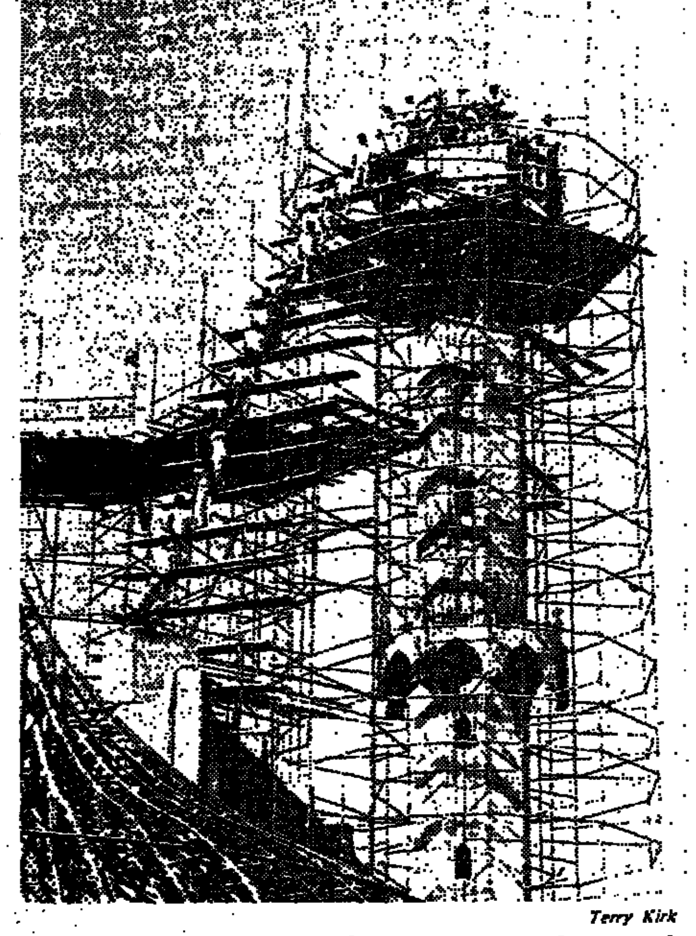
Like Kuwait, the UAE is faced with the problem of meeting inexorably rising demand for electricity and water with the power station on the Abu Dhabi-Dubai border the biggest single project in this sphere.

Egypt's explosive population growth and its pressing development requirements, especially those arising from past neglect of infrastructure, should make it second only to Iraq as an expanding market.

The finance should be available for its development plan, which envisages total spending on construction of 4.5bn Egyptian pounds ($6.52bn) including work in the six new cities designed to take the pressure from Cairo. The renovation of the capital in itself is a colossal undertaking which has hardly yet begun.

Yet it is the booming private sector, the commercial and hotel developments, that continues to attract the eye of the international, not the least British concerns.

The system ushered in by the "open door" policy is liberal enough to allow such indulgences as cost-plus contract terms. The rich oil-producing states are as insistent as ever on fixed-price contracts and other tough clauses that can help to make contracting in the region a nightmare.



Terry Kirk

A human chain lifts bowls of cement to the top of a minaret in the construction of the Al Adliyah mosque, Bahrain

Frustrations of an uphill climb

South-East Asia

ROGER HOGAN

BARELY THREE years have passed since the construction industry started seriously to consider South-East Asia as the next big market after the Middle East. In that time the mood has changed from guarded optimism, through valiant endeavour, to the first signs of frustration. The major projects are there, but British success so far has been sporadic and hard won.

Four out of the five British companies to prequalify for the £180m Penang Bridge in Malaysia declined to return a price earlier this year because the competition—a formidable list of 44 international contractors—was simply too much. John Laing was recently prompted to reflect on its future in the region after narrowly losing a £30m hospital contract in Singapore to a New Zealand company.

However, it is not simply the effort and expense of competing for big orders that makes breaching these markets seem an uphill climb. There is also the feeling that the client countries, both on their own account and through their long association with Japanese and Korean contractors, are operating what amounts to a closed shop.

Although British enterprise and know-how tends to be more widely employed in Malaysia than other members of the Association of South-East Asian Nations (ASEAN), the country is demanding greater commitment from foreign companies to help meet its ambitious targets for technological progress and social restructuring. Its relatively developed industrial base makes labour scarce and expensive, and contractors frequently have to import Indonesians, Philippinos and Indians to make up the workforce.

Indonesia is an even more difficult market: here presidential decree guarantees indigenous contractors preference over foreign interlopers. An important trend in the last year has been the flattening out of the timber market and construction upsurge in terms of contracts awarded and mechanisation introduced. The massive government programme of moving people into the country's less developed regions plays a major role. Timber contractors in these regions, most of them local Chinese, are using their heavy machinery to carry out thousands of square miles of jungle clearance.

The rapid progress of Far Eastern companies in the region continues despite reports of Japanese bankruptcies and a scandal which last year cast a shadow over the dealings of Korean contractor Hyundai in the Middle East. In April Mitsubishi of Japan won a £33m contract for building two electricity plants at Port Klang, Malaysia, while in 1980 alone Hyundai totted up £80m worth of orders on a hydro power plant and a cement factory.

Despite such problems, the economies within ASEAN remain an attractive proposition with annual growth rates for Malaysia, Indonesia and Singapore averaging between 8 and 10 per cent. According to figures compiled by Plantecon (Overseas) Research, a market research company fast becoming an authority on the region, sales of heavy plant and equipment at 1980 prices will reach U.S.$3.1bn by 1984—a 53.2 per cent increase over last year's figures.

Underpinning this growth is a 44.6 per cent average rise in annual development budgets for the region as a whole. By the middle of the decade, Malaysia will be spending U.S.$10.4bn, compared with U.S.$6.7bn in 1980, with roads, railways and housing achieving the fastest growth. Apart from building the world's third longest bridge at Penang, it plans this year to start a £110m railway improvement between Seremban and Rawang and an £80m irrigation and housing scheme for the Ministry of Agriculture.

Spending in Indonesia, the region's biggest economy, is expected to rise by a staggering 80.9 per cent to U.S.$17.8bn. While the lion's share of capital investment will continue to be taken by industry, the movement of population is accelerating outlay on infrastructure. Projects about to start include a £95m irrigation scheme in southern Central Java, road improvements worth £35m betwkeen Java and Kalimantan and construction of the major Jakarta-Cikampek highway.

Although Thailand and the Philippines will show smaller rates of growth, they offer a considerable number of large contracts. Consultants are being sought to perform feasibility studies for Thailand's £508m airport at Nong Ngu Hao and a £65m ASEAN trade centre near Bangkok. Mining remains the priority sector in the Philippines both in terms of capital investment and growth, and earlier this year British company Burnett and Hallamshire formed a consortium to search for coal deposits on the island of Luzon.

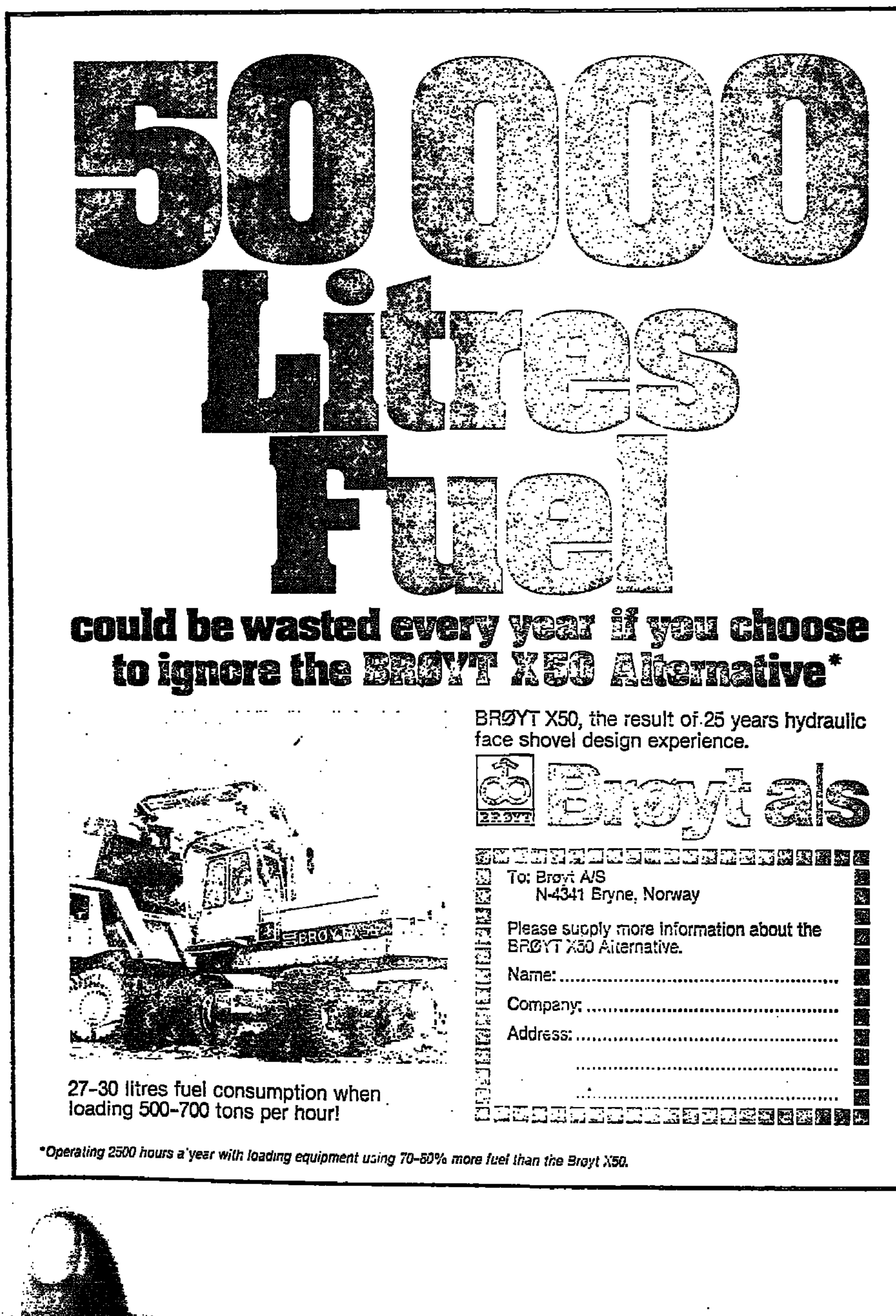
With so much to be gained, contractors can be forgiven the occasional gloomy lapses as they battle against nationalistic government policies and aggressive competition. However, to lose heart now would be premature, according to the few British companies already established in the field. They detect a growing pragmatism on the part of some governments who are putting policy to one side and talking instead about aid and financial packages.

This is particularly true of the Philippines, where Balfour Beatty succeeded last year in securing nearly £23m worth of orders backed by a mixture of aid and credit from Britain's Overseas Development Administration and Export Credits Guarantee Department. The company rates such packages as highly as World Bank financing, on which it is now bidding to supply steel bridges to Thailand.

Winfred Richter, managing director of Plantecon, insists that aid should be used aggressively, as a business proposition. "If the Government would couple more loans to the use of British goods and know-how, the national productivity effect would strengthen our competitiveness."

There is optimism, however, among some of the companies who joined the rush for the market in the late 1970s. Matthew Hall, the engineering contractor, is happily carrying out bread-and-butter contracts from its Singapore offices and is confident of soon clinching big orders from Malaysia's energy sector. It expects local staff to grow from 60 to 100 by the middle of next year. The message is simple: keep trying.

Roger Hogan is Contract News Reporter on Construction News.



Scramble for rich pickings

Australia

COLIN CHAPMAN

IN RECENT weeks, undaunted by the flat world economy and the wave of labour disputes that have been plaguing Australia, top men from many of the major construction companies have been treading a path to Sydney, Brisbane and Melbourne to win their share of the rich pickings now available from the country's resources boom.

Engineering and construction companies are engaged in a fierce scramble for part of the $33,000m worth of major projects that are beyond the drawing board stage.

Contracts now out to tender include harbour, road and rail and other infrastructure works; the design and construction of aluminium smelters, power stations, oil and gas production platforms, pipelines and many new coal mines. New technological challenges include coal-to-oil plants, oil shale developments, and works associated with titanium processing.

In the more distant future is the prospect of uranium enrichment plants and other ventures which are currently the subject of feasibility studies designed to push Australia to the forefront of nuclear technology.

Although the bulk of the work available is in the resources sector, the opportunities are by no means limited to it. After many years of recession the property market is beginning to look up in some cities, notably Sydney, and the city's skyline is destined to become even more like that of Wall Street as new office towers, hotels and shopping complexes pass through the planning stage—many of them to be financed, interestingly, by Chinese money from Hong Kong and Singapore. The UK property developers no longer hold sway.

New factory estates are being built in outer suburbs: an indication that light industries, many of them based on electronics and petrochemicals, are sprouting up to take the place of more traditional industries. The only area of construction that is flat is residential housing.

Australia's own construction industry is naturally eager to win as much of the business available as possible. It is fighting hard in a competitive market, with some help from the foreign investment review board, which is keeping a vigilant eye out for takeovers planned by overseas companies designed to limit domestic capacity.

However, the Australian industry acknowledges that it cannot handle the total pool of business currently available, and forecasts that overseas companies could win a 30 per cent share of the market. Half of this would come from Australian groups buying materials and equipment or technological advice from them, and the other half from construction contracts let to their Australian subsidiaries.

A rough breakdown of resource development can be gleaned from a survey by the Department of Industry and Commerce, which showed up to $9.31bn could be spent on coal developments, $9.97bn in the oil and gas sector, and $7.59bn on base metal projects, most of them involving the aluminium industry.

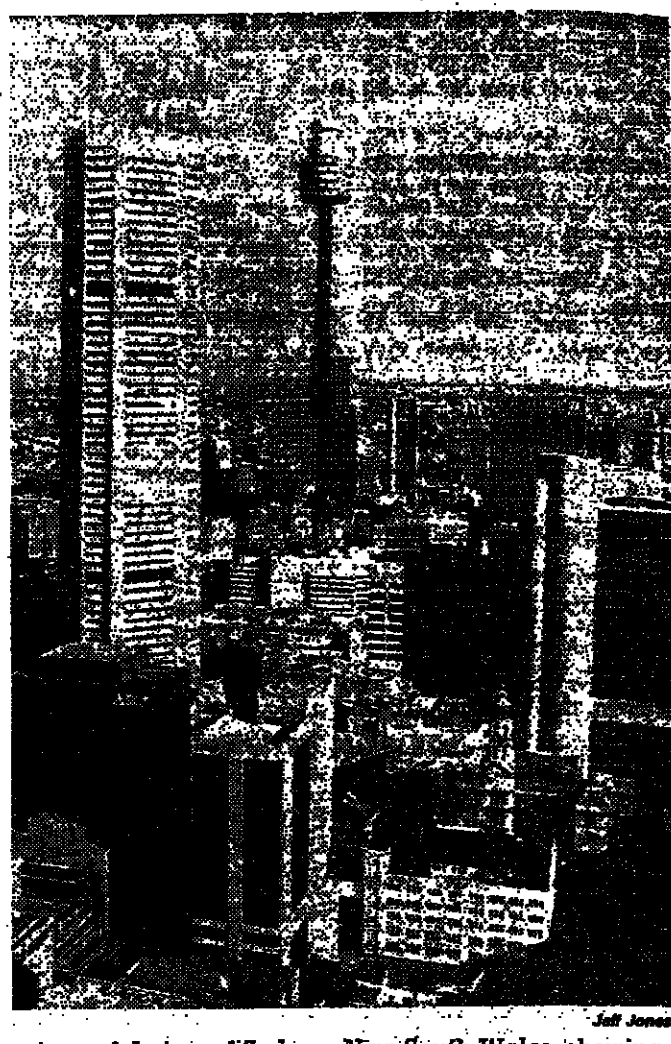
The same survey forecasts that Queensland and Western Australia will host a large proportion of these developments, with $8.79bn and $10.49bn respectively budgeted by the private sector. Another very important area will be the Hunter Valley region of New South Wales, 100 miles to the north of Sydney, where some of the biggest coal and aluminium developments are sited.

One of the biggest headaches for both overseas and Australian construction companies is labour. Unlike the Middle East, or other development areas where there is a rush of new construction projects, immigrant labour is out of the question, particularly Filipinos or Koreans.

Australia does not accept temporary settlers or guest workers and processing the application of a skilled worker for migration can take many months even a year or more. So companies have to fall back upon the existing construction workforce, which tends to be choosey about which job it will work on, and which is seldom mobile except in vacating a site where the contractor refuses to pay the constantly upward-moving rates expected of him.

Some companies have got round the problem through genuine worker participation: offering labourers a percentage of the contract prices or a share in the equity of the firm. In Sydney's business district one tower block is still unfinished after almost a decade of stoppages and industrial problems. Fifty yards away another block is almost completed after only 18 months.

A recent senate inquiry found that the manpower requirements of the bauxite and aluminium industries alone at the committed and final feasibility stage amounted to a peak construction workforce of 12,700. The inquiry identified the Hunter Valley and the Gladstone area of Queensland as the locations likely to suffer most from shortages of skilled labour.


Jeff Jones

An aerial view of Sydney, New South Wales, showing the tallest building, Centre Point, which may open in September

The same inquiry found that most overseas construction companies would be likely to spend their money within Australia, although a small percentage would be let to groups completing works in other parts of the world, like Nippon Kopak's $10m North-West Shelf contract to build an offshore gas production jacket in Japan.

Excluding resource projects, the Australian Federation of Construction Contractors expect business to grow by 10 per cent a year over the next two decades. This alone, says the Federation, is likely to lead to more overseas companies moving in to Australia and establishing operations similar to those of the U.S.-based Chicago Bridge and Iron, and the French EPTM company.

Chicago Bridge and Iron, an engineering group with $1,000m worth of work in hand, has established a subsidiary, CBI Constructors, in Western Australia. It recently won a $21m contract for the $1,000m Worsley alumina refinery, and a $30m contract, in tandem with a local company, for accommodation modules and a helipad on the North West Shelf.

Many international companies have found that the best way into the market is to form joint ventures with Australian companies. This is particularly useful in that they swop technological know-how for an insight into Australia's curious labour relations. One company, Leighton's, founded as a subsidiary of the UK-owned Leighton (Contractors) Ltd, has now formed links with the London-based Candac Ltd.

One successful joint contract was Sydney's Botany Bay container terminal which won a national construction award last year. The two have also completed a $6m wharf extension at Geelong, and are working on a $5.3m wharf at Newcastle, an $8.5m coal facility at Port Kembla, New South Wales, and a $30m bridge at Hobart, Tasmania.

Theiss Holdings, a major contractor in Queensland and the Northern territory, joined up with overseas companies in a number of major projects. At Wivenhoe Dam, west of Brisbane, Thiess has a joint venture with the Italian Codelfa-Cogefar group and Evans Deakin for $30m of civil works for the hydro-electric power station, and at Loy Yang in Victoria with the German Hochtief company in the building of two chimneys.

Expectations of a gentle recovery

United States

RAY MAUGHAN

THE LEVEL of construction activity in the United States fell steeply last year, as in many other major markets, but it is expected to show gentle recovery this year and a more pronounced upturn in 1982.

The U.S. Department of Commercial Index of Construction Volume, based at 100 in 1970, slumped to 92 last year and is not expected to have risen above 94 this time. The forecast for 1982, however, is indicating a recovery to 106.

Nonetheless, this broad upturn disguises significant fluctuations in various segments of the market. Non-housing building, streets and highways and public works, for example, are expected to remain significantly below the base line next year with housing and utilities demonstrating sufficient growth to lift the Index as a whole.

Housing accounted for almost £100bn or 43 per cent of the total $229bn U.S. construction sector last year. The National Association of Homebuilders (NAH) is looking for a 10 per cent rise in the level of housing starts between 1980 and 1990 and the 17.6m starts undertaken in the last decade.

The most pessimistic assumptions for annual average starts in the current decade indicate 1.5m new house starts whereas the most bullish projections are for 2.1m. The median is about 1.8m.

Non-U.S. competition has a lot to aim for. Figures compiled recently by International Construction Week show that the outsiders have only won a very small toehold in North America. The 6 per cent rise in first quarter GNP this year will almost certainly weaken throughout the rest of 1981 but the gradual rise in activity generally, however concentrated in particular sectors, must widen the target.

The major shifts in currency values this year must help, too, now that the dollar has enjoyed a significant re-rating against almost all leading international currencies. For the moment, though, International Construction Week's chart showing How the Top International Contractors Shared the 1980 Market, reveals that non-U.S. contractors were awarded contracts worth only $2.9bn.

The 115 European contractors took the lion's shares of what work was available to outsiders with contracts valued at $2.7bn or 93.5 per cent of the non-U.S. total. Within Europe, the West German construction industry was most successful in America, winning contracts with a combined value of $1.5bn. The 24 UK construction companies which fall within International Construction Week's parameters were awarded work valued at $800m, or 27.1 per cent of the non-U.S. total.

Canadian firms dominate what U.S. design work is available to non-U.S. companies. ICW's survey of the billings shared by the top 150 international design firms indicates that nine Canadian firms won design contracts worth $53.8m, or 91.5 per cent of the U.S. work awarded to outsiders.

The European proportion was limited to 8.5 per cent, worth $5m, and again dominated by West German firms. They were awarded design contracts worth $2.3m, while the UK share was worth just $500,000.

If the projections made by the Department of Commerce and the bullish predictions of the Homebuilders' Association prove correct, housing may be most encouraging point of entry and expansion for outside builders, given the clamps which the Reagan Administration seems set to continue on public spending.

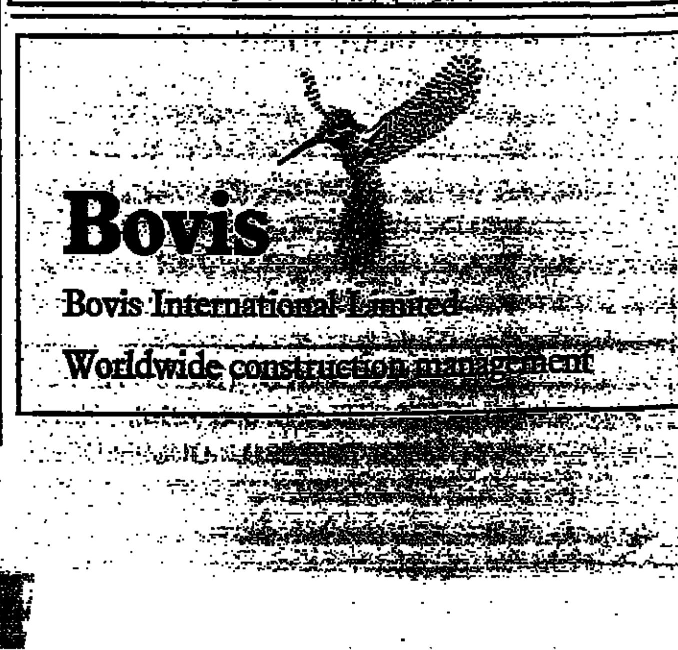
As part of its comprehensive analysis of world construction markets, London stockbrokers Savory Milln have highlighted the developments in California recently launched by Britain's largest independent housebuilder, Barratt Developments.

Barratt acquired American National Housing Corporation (ANHC) for $12m in March last year and followed this up with the purchase of the quoted McKeon Construction Inc. for $32m in April 1981.

The two deals have pushed Barratt into the top four housebuilders in California and the broker expects its Californian completions to reach about 2,500 annually by about the end of next year. That, however, implies a significant reversal of recent trends. ANHC, for example, built 400 homes in 1979 butonly 300 last year. McKeon's recent performance has been even more drastic. It sold some 2,000 houses in 1978 but sales had fallen to just 400 units last year and are not expected to rise very much this time.

The houses, although concentrated at the lower end of the market, are built to a high standard and fully fitted. However, it is surprising to learn that, according to Mr Bob Erith, a partner in Savory Milln, the "American housebuilding industry is well behind the UK equivalent in marketing ideas and sales aids."

So it seems likely that, with the help of an upturn in the Californian housing market generally, at least one newcomer will be attempting to push sales growth by using the marketing ploys which appear to be succeeding on the other side of the Atlantic: notably, the provision of mortgage facilities and the purchase of customers' existing homes.



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MANAGEMENT

EDITED BY CHRISTOPHER LORENZ

Management abstracts

Tackling the Human Side of Planning. R. T. Lenz+M. A. Lyles in Long Range Planning (UK), Apr. '81: p. 72 (6 pages, charts).

Reports from a study of company planners that the two most common obstacles to their work are the failure of organisations' reward structures to encourage long-range planning, and the lack of strategic thinking during the planning process; notes remedies proposed by the planners, but suggests that such difficulties ought not to be viewed in isolation; outlines a wider role for planners which sees them as organisational psychologists.

Why won't managers co-operate? C. White in Industrial Relations Journal (UK), March/April 1981: p. 61 (11 pages)

Based on the author's experiences in an unnamed electrical engineering factory, sees low productivity and lack of innovation as major causes of the alleged decline of the industry; argues that solution can come fom greater shopfloor participation, and examines paths towards, and resistance to, this; contends that managerial behaviour and attitudes are the chief block to participation, and discusses why this is so.

Auditing foreign exchange trade operations. H. M. Albergo in The Internal Auditor (U.S.), April 1981: p. 23 (5 pages, chart, table).

Points to the growing importance of foreign exchange dealing in commercial banks; suggests that, given the complexity and the risks, this is a suitable field for internal audit, and outlines a programme of involvement.

Foreign currency exposure management. C. Wihlborg in Journal of International Business Studies (U.S.), Winter 80: p. 9 (10 pages).

Sets out to show that the foreign currency exposure of an overseas subsidiary depends primarily upon the currency and the commodity composition of its own future transactions; suggests that the cost of collecting this local data could outweigh the benefits of centralised expertise, and sees a strong case for decentralising decision-making on foreign exchange control.

These abstracts are condensed from the abstracting journals published by Anbar Management Publications. Licensed copies of the original articles may be obtained at £2.50 each (inc VAT and p+p: cash with order) from Anbar, PO Box 23, Wembley HA9 8DJ.

Why Toyota feels it can afford to go it alone

Richard Hanson explains the Japanese car company's 'risk avoidance' strategy

DR SHOICHIRO TOYODA, the new president of Toyota Motor Sales (TMS), the sales arm of the giant Toyota group, describes the start of his reign as "a very trying and turbulent time." Hardly anyone in the motor industry would disagree.

Looming ahead is a period of escalating competition among the world's car companies, one which is already tinged with international protectionism. The cost of remaining competitive is enormous, and has already sent many companies scrambling for protective international tie-ups.

Toyota's approach, however, has been to stick doggedly to its own resources, tailoring a careful strategy to expand at home and overseas. This tack appears to go against the trend, and doubts over Toyota's ability to match its past success are heard more often these days—though mostly from competitors.

Those doubts are not to be found inside Toyota, or for that matter among motor industry analysts who reckon the company is adjusting well to both the general problems faced by the industry and what appears to have been a period of mild internal disarray—though if Toyota has passed through a management crisis, it was kept very much in the family. The best guesses are that Toyota's unique strengths will continue to keep it successful.

These strengths have been built up since the 1930s when the car company was spun off from what was then the Toyota family's main line of business—building automatic looms—based near Nagoya in central Japan. Toyoda Automatic Loom Works is still considered the parent company. More important the Toyoda family itself still plays a key role in cementing ties within the Toyota group. The group now includes 16 companies—many of them spin-offs from the parent—though none of them is consolidated for accounting purposes. Toyoda family members are found in key positions in a number of these companies.

The Toyota Motor group is dominated by what are often called the "two wheels." Toyota Motor (TMC) develops and produces cars. Toyota Motor Sales (TMS) markets and services them both at home and overseas. The two have been "independent" since 1950, when a Bank of Japan-lead rescue plan split the production and sales arms to ease a cash flow crisis: at the time, Toyota's sales had collapsed under severe economic recession. Before the split, Toyota suffered its first (and last) period of labour strife.

Fortunately, *the symbiotic* relationship worked well. Though TMC owns 44.07 per cent of the sales company, the links critical to the smooth running of the company have always been personal ones between top executives. This was symbolised by the two "gods" of the group's postwar development. Taizo Ishida (1888-1979), a production genius, seemed to be in perfect synch with Shotaro Kamiya (1898-1980), who built up the sales company from scratch. Their close relationship (having joined Toyota from the start) meant a smooth meshing of production and consumer trends.

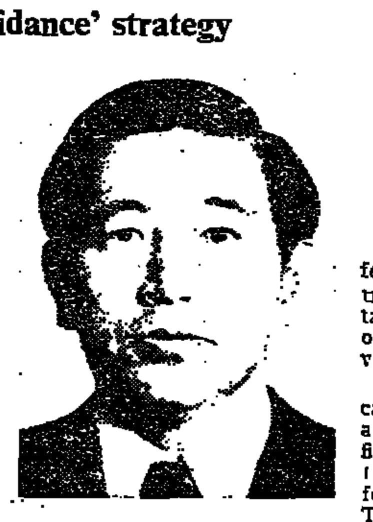
By separating the two functions, each "wheel" was able to concentrate on what it did best. Toyota Motor concentrated its energies in Aiichi Prefecture, the home of the Toyoda family in central Japan, where nine of its ten major plants are still loctaed. The proximity of Toyota plants, affiliates and suppliers (it is said that all of them are *located in the 550 km stretch* running from Tokyo to Osaka) allowed the company to establish its now famous highly efficient "just in time" system of inventory control. Under this Kanban system suppliers are kept to a strict delivery schedule thus allowing the main assembly plants to keep a bare minimum of stocks.

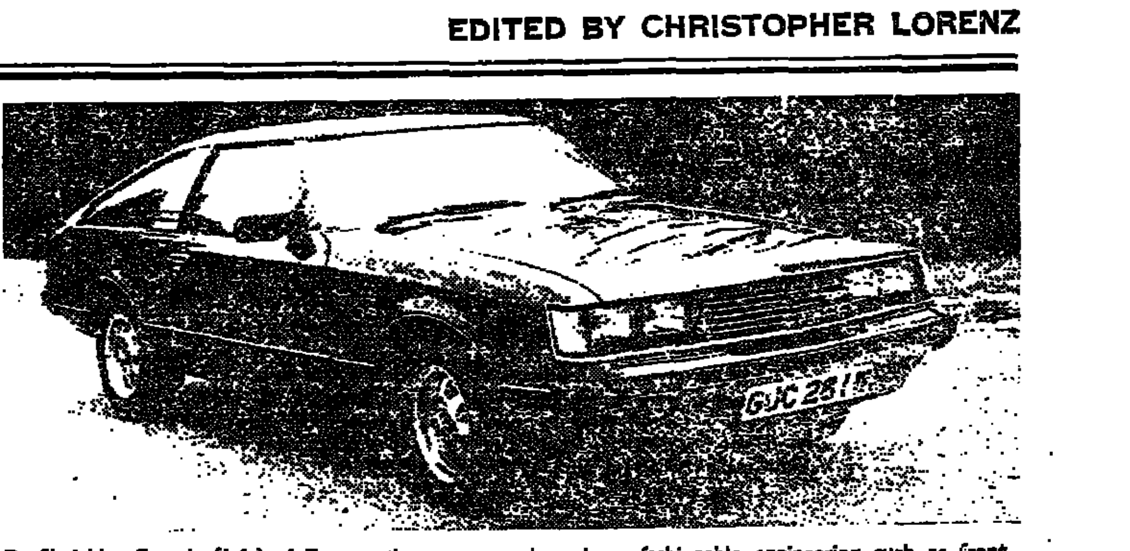
The geographical advantage is one reason why, with only 20 per cent more production than Nissan Motor, Japan's second largest producer, Toyota's combined TMC and TMS operating profits have been consistently twice as large.

TOYOTA MOTOR/TOYOTA MOTOR SALES VERSUS NISSAN MOTOR

	1976 Yen	1977 Yen	1978 Yen	1979 Yen	1980 Yen
TMC/TMS					
Combined profit	220.8bn	259.6bn	244.3bn	245bn	363.6bn
Profit per employee	4.5m	5.26m	4.89m	4.9m	7m
Production	n/a	n/a	2,929,157 units	2,996,225 units	3,293,344 units
NISSAN					
Profit	101.2bn	151.8bn	138.4bn	120.1bn	133bn
Profit per employee	1.97m	2.89m	2.54m	2.15m	3.23m
Production	n/a	n/a	2,392,598 units	2,337,821 units	2,644,052 units

Note: Accounting periods are slightly different for TMC and TMS





Dr Shoichiro Toyoda (left) of Toyota: the company plays down fashionable engineering such as front wheel drive and turbo-charging if they are not direct contributors to fuel economy. The Celica coupe (above) is typical with its front engine and rear wheel drive

Doubtful

Toyota Motor executives are understandably doubtful that the efficiency achieved in Aiichi can be matched in any major manufacturing venture in the U.S. or Europe. *This, perhaps* more than any other single factor, accounts for Toyota's refusal to set up such a venture. Unlike Nissan, Toyota's basic *philosophy is, therefore, one of* "risk avoiding" rather than "risk taking."

While Toyota Motor was developing its particular production approach, Toyota Motor Sales, with its headquarters in Tokyo, was left free to develop markets. TMS found that with a comparatively low level of *capital investment it could set* up "independent" sales companies. In Japan, there are now six such companies. In the U.S., TMS offered local distributors *large regional markets.* TMC and TMS are normally partners in overseas sales and assembly ventures.

The arrangement, however, appears to have come under considerable strain with the passing of the originators' Ishida and Kamiya. The second oil crisis in 1979 emphasised these rifts. It is generally felt that TMC and TMS were slow to co-ordinate production and sales in the rapidly changing market environment which followed the Iranian revolution.

It is also clear that Toyota lagged behind in adopting "fashionable" new technology (though not in developing it) such as front-wheel drive and car electronics. As one analyst comments, "*everything* Toyota designed began to look alike."

Toyota admits that the "two wheels" were having "trouble taking corners together." Its *dealers were disheartened by* a slip in market share for all vehicles—cars and trucks—in the home market to 29.8 per cent last year from 32.3 per cent in 1978.

Nissan, however, also lost some ground: 23.3 per cent from 24.4 per cent. The losses were mainly the result of aggressive *drives by smaller companies.*

In the meantime, Toyota was being pressed by outside factors, namely protectionism, which eventually led to "voluntary" *restraints on exports to North* America and the EEC. Differences of opinion between the production and sales sides were reckoned to have arisen over *how to cope with these* growing international tensions.

The two main responses were the commissioning of three "think tank" studies on the feasibility of building a car or truck plant in the U.S. and talks with Ford Motor Company on a joint production of vehicles in the U.S.

Two out of three of the studies came out completely against a U.S. plant. Talks with Ford fizzled out earlier this summer. (These, incidentally, were the fourth round of talks between Toyota and Ford over joint ventures. The first was held in 1936.) Both these efforts were viewed by some as "smoke-screens" aimed at mollifying U.S. public opinion about Toyota's intentions in the U.S.

In one case, the company resorted to the rather cosmetic trick of adding the word "manufacturing," with considerable fanfare, to the name of a California subsidiary producing truck beds for imported small truck chassis.

To check the growing sense of internal drift, Toyota's senior statesmen decided it was time for a management change. The result was the elevation in June of the son of Toyota Motor's founder, Dr Shoichiro Toyoda, to head Toyota Motor Sales.

Dr Toyoda, 56, a relaxed and slightly rumpled - looking engineer, was moved from his post as vice-president of the production company. The move was considered adroit. The new president should have little difficulty closing the "communications gap" between production and sales. The production company, *since 1967, has been* headed by his late father's cousin, Eiji Toyoda.

Even though there is a strong Toyoda family presence at this stage of the company's *history* (after a stretch of non-family leadership for most of the post-war period) there appears to be little family "control" of the *company in the Western sense.* The top three members of the family own just over 1 per cent of Toyota Motor. (By contrast the Ford family controls 40 per cent of the voting power in Ford Motor Company.) The presence of a family member, however, *does provide a convenient focus* for diverse loyalties dating from the early days.

Indeed, Dr Toyoda sees his role as "enhancing the co-operation and team spirit" of the Toyota family of companies. Observers say that the appointment is his first step toward the presidency of Toyota Motor, a *prospect that has generally* cheered people inside the company.

There is also speculation that Toyota may attempt a merging *of TMC and TMS. But after* 31 years apart, this may prove difficult, partly because employee loyalties are strongly attached to the separate units. A merger, in any case, is not essential for Toyota to carry out its ambitious plans.

Though Toyota does not make its goals public, the company is believed to be aiming at a 40 per cent share of the domestic passenger car market and a 10 per cent share of world production by 1985. Last year it had 37.3 per cent of passenger car sales at home, and about 8.4 per cent of world production.

Saturation

To achieve these goals, Toyota plans to spend about $1.5bn a year for the next three years on new plant and equipment. While this represents only about one-fifth of what General Motors of the U.S. plans to spend, an unpublished analysis by Nomura Securities, Japan's largest securities dealing firm, indicates that, per dollar, Toyata's spending should be about three times as effective in boosting productivity.

This does not mean that Toyota's output will rise sharply, but it does indicate that the Japanese maker should have little trouble maintaining its edge in production efficiency.

Toyota can probably count on steady growth in the Japanese market, in spite of the impression that the home market is approaching saturation. Recent studies indicate that demand from previously almost non-existent sectors is strong (women, and second car families to name two important areas).

Though Toyota may give the impression of lagging behind in developing an overseas base (it is the only Japanese car company left without direct links to a foreign market), it has taken its expansion pro*gramme abroad seriously.* Concentrating outside the advanced industrial countries, Toyota now has 11 assembly plants outside Japan. Last year a surprising 15.2 per cent of its exports were in the form of knock down models.

In the meantime Toyota will stick to its guns on producing cars *which appeal to the greatest* number of consumers possible. This is one reason Toyota tends to play down technological innovations like front-wheel drive, and turbo chargers for engines, which are now the fashion, but do not necessarily help fuel efficiency.

"Toyota is convinced that saving fuel is still the biggest item on the agenda," says one official. As such, a large proportion of the company's spending has gone into producing a new engine series, called Lasre (an acronym for Light-weight Advanced Super Response Engine). Toyota claims to be undertaking the most extensive engine model change in the industry.

President Toyoda, with an appropriate degree of family pride, says: "We intend to continue our historic commitment to the development of high performance, fuel efficient small size cars that will win respect all over the world."

BUILDING AND CIVIL ENGINEERING

Reaching for the stars

BY DEBORAH PICKERING

ACCORDING TO Acrow Group's Coles Cranes, when a crane is not a crane it is a Starlift self-propelled access platform designed to *safely lift* one, two, or even three people up to a height of 22 metres.

This enables work or inspection to be carried out on the exterior or interior of buildings, the underside of bridges and aqueducts, the construction and maintenance of chemical plants, the installation of plumbing and sprinkler systems, the overhauling and inspection of aircraft — anywhere, in fact, where people and tools need to be raised off the ground.

Coles took a detailed look in the late 1970s at the market for powered access equipment, researching mainly in the U.S. as it already had knowledge and experience in European markets.

From this *exercise,* was established three vitals:

Firstly, demand for access equipment promised substantial, if not dramatic, possibilities for growth over *at least* a five year period. And the growth pattern seemed well ahead of expectations for construction equipment and materials handling equipment generally in what Coles calls its relevant market. Its principles were not dissimilar from the 1960s scene when telescopic cranes began to make their initial impact on crane fleets in Europe.

Second point was that the company was working in an area of kindred technology—a strong affinity exists between entrenched engineering traditions of crane design and newer precepts of mobile telescopic platform design.

Coles set out to breed its own technology, eschewing American import, and highlighting European design traditions, because in the latter continent countries *place different* requirements on the manufacture. Hence Coles' back to basics, home grown design approach which has not in any way been adapted.

Third discovery was that the company's market research in the product sector in which it operated was not dominated by *any major maker* in the market which Coles considered was its own parish. Although market leadership exists in the U.S. the scene is very open in Europe, *Africa and the Middle East.*

So, the company is attacking and developing markets rather than warring with entrenched competiton, in introducing two *new mainstream models as* the basis for a full range range.

With the launch of Starlife 722 and 717 Coles has determined to outshine the competition in four main areas—safety, reliability, precision of control and travel speed. Unlike the American machines available, these platforms are built specifically to comply with European safety standards and require no modification, says the company.

Larger of the new products is the Starlift 722 which has a three section boom and a working height of 22 metres, while the 717 has a two section boom and working height of 17 metres. *Attention to the safety* details of both, which have been designed and built at Glazebury, Warrington, Lancashire, is meticulous and of prime im*portance.*

Even with the higher payload, Starlift's stability is said to be superior—the machine has been engineered, says Coles, with a full 100 per cent overload as standard.

Production *of* the Starlifts has given a great boost to the 300 workforce at Glazebury, many of which have been with the company for over 20 years, one man actually working at the site for over 35 years.

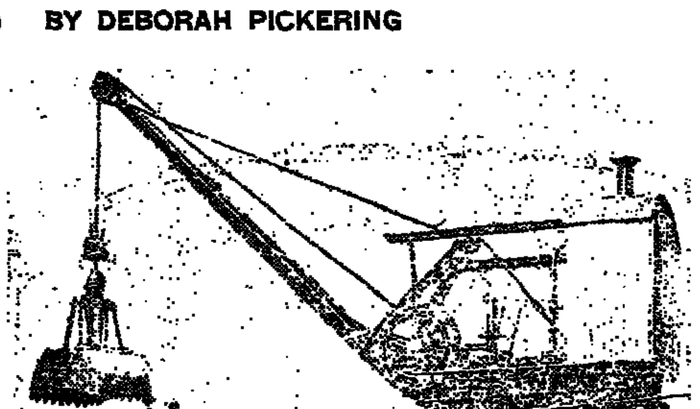
Here, machines start life as a series of parts in the form of a *chassis, superstructures* and boom. In the main assembly shop machines are completed including components made by Coles, sub assemblies, and bought-in items like engines and gearboxes. In a modern hydraulic crane there are over 4,500 major parts.

At Glazebury, some 1,200 items are held in stock and all recorded on a computer which is linked to other parts stores thus providing the factory with *what the company claims* to be the most advanced parts operation in the crane industry.

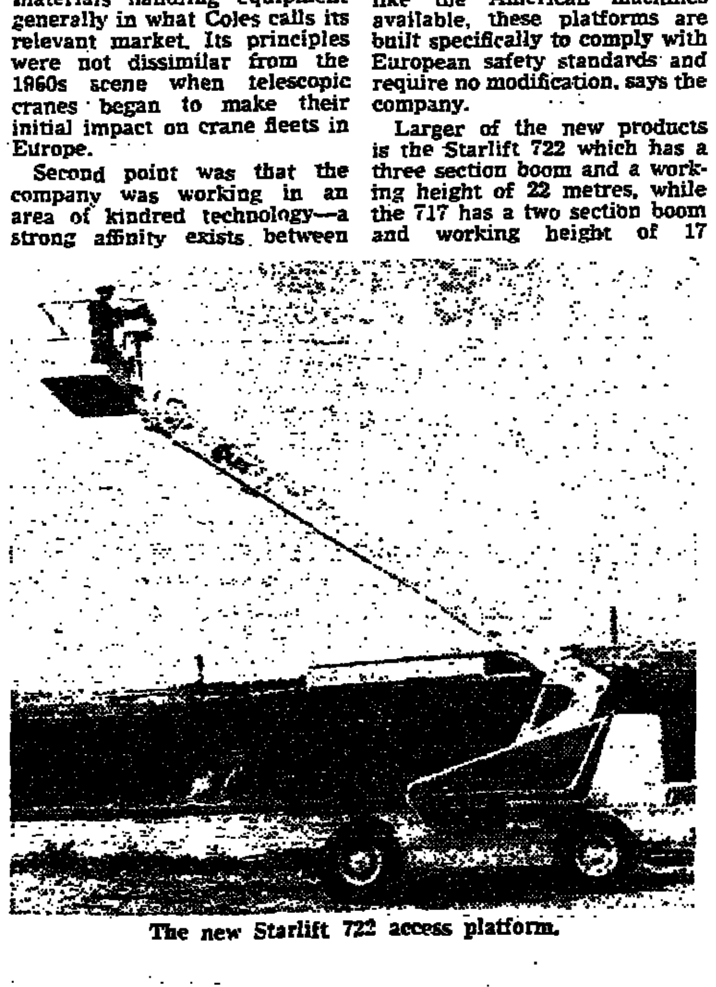
Coles has been going for over 100 years, taking its name from Henry James Coles, who was typical of his generation, an innovator. The company led the world with truck cranes in 1922, automatically reversing steering in 1931, with the start of mass produced cranes in 1938.

It set world records for capacities throughout the 1950's and pioneered telescopic cranes in the 1960's.

What is evidenced by the company's present standpoint is that one generation of crane designers has taught the next that planning for the future is as vital for survival as heart's blood.



One of the first cranes built by Coles is this full-slewing rail-mounted grab crane supplied to the Glasgow Gas Works in the early 1890s.



The new Starlift 722 access platform.

Rees Hough rings changes

MOVING FROM traditional tunnelling and pipe jacking activities into a new field is Rees Hough (Civil Engineering) with £3m's worth of work covering the construction of a major pumping station, dam construction, sewer renewal and specialist geotechnical works including grouting and chemical stabilisation.

Largest project is worth £790,000, for rebuilding an outfall pumping station at Portobello in Brighton. Also received is a £550,000 order for an oxidation ditch treatment works at Hailsham in Sussex. Both these jobs are for Southern Water Authority.

Sewer *renovation* work, totalling over £770,000, is for the cities of Manchester and Sheffield, while other work includes schemes for the Electricity Generating Board, an impounding dam and reservoir for Hastings Borough Council, a tunnel for Peterborough Development Corporation, a pipe jack for Thomas Loew Homes, sewer grouting for Thames Water Authority and flood relief pipe jacking for Southern Water Authority.

Pension fund pledges £12.5m

JOHN LAING Construction announces a £12.5m award for the construction of offices and warehousing at Denham, Bucks., for the National Water Council Superannuation Fund.

A 10,220 square metre four-storey, air conditioned block will be built, together with two single storey warehouses totalling 22,700 square metres, car parking facilities, roadworks, all drainage and services, and extensive landscaping.

The office block will be of in situ reinforced concrete frame, stainless steel curtain wall facades and mirrored glazing to all elevations. A patented raised floor system and fibrous plaster suspended ceilings is planned within the office area.

For the two warehouse units, the company is to construct reinforced concrete pad foundations, a reinforced concrete ground bearing slab, and a structural steel frame.

This frame will be clad with colour coated profiled metal cladding with windows at front and side elevations, and a patented pvc continuous raised monitor rooflight detail to the ridge.

Each of the warehouses will be divided into two units with two fully-fitted mezanine level offices.

Petros Development Co. (Leeds) has awarded Laing a £3m contract for a project involving a six-storey office block and three other three-storey office buildings, together with parking areas for 250 cars, roadways and landscaping.

Construction of the six-storey block comprises an in situ concrete frame with brick and blockwork cladding. A three-storey linkblock will connect it to one of the three lower office buildings which will be constructed in brick and block walling with in situ concrete floor slabs.

Gleeson gets sludge scheme

MAJOR JOB awarded to Gleeson Civil Engineering in a batch which totals £3½m is the *Dukinfield ETW sludge digestion scheme for* North West Water Authority of Manchester, valued at £1.9m. Work has already started and completion *is scheduled for June 1983.*

Work on the Beaconlough Reservoir for Newcastle and Gateshead Water Company is worth just under £½m, and another £128,000's worth comes from Warkworth Harbour Commissioners for repairs at Broomhill quay.

Other projects include Ferndale Comprehensive School reclamation scheme (£226,876) for the Mid Glamorgan County Council: drainage to the Glen Rhondda Tip 220 near Blean-y-cum (£47,000) for the National Coal Board: and the Doune Service Reservoir (£164,000) for the Central Regional Council in Scotland.

Gleeson (Sheffield) has *received a contract worth* £756,337 from the Northern Counties Housing Association to build 55 dwellings at Chesterfield.

Mixed bag for Fairclough

WORK STARTED on three sites *last week when Fairclough* Building's north eastern division learned it had won three contracts worth £6.1m in Leeds, Hull and Bradford. It picked up another £3.47m at Accrington in Lancashire last week.

In Leeds, the company is building a seven-storey office block in St. Pauls Street (value £4.1m) for Landmark Development Consultants.

An Asda superstore and adjoining shop units are worth £1.5m for a district centre that Fairclough is building for Associated Dairies at Bilton, Hull.

A Bradford contract from the North Eastern Postal Board is for £½m and covers the design and build of a motor transport workshop in Canal Street.

The Department of Transport has made an award of £3.47m for the 1.3 kilometre Accrington, Lancashire, Easterly by-pass (northern *section*).

In the centre of Gateshead, the company will develop a £4m complex in the town's centre where a triangle of offices, shops, flats and a major store will be built alongside Gateshead's main transport interchange.

This *development comprises* a 65,000 square feet superstore, 13 shops of varying sizes, 36,000 square feet of offices, 26 single-person flats, and a 160-space surface car park.

Minutes away from Piccadilly Circus, Fairclough has won a £1.85m refurbishment contract to alter, modernise and extend offices at Imperial House, 80-82 Regent Street.

This project involves 2,500 square metres of office accommodation on five floors, to be fully air conditioned, above an existing shopping arcade.

By-pass for Miller

WORK ON the 8.7-km A1 Berwick-on-Tweed by-pass has been won by Miller Construction with a tender of £7.4m.

This new trunk road includes a major four-span bridge over the River Tweed based upon an alternative design submitted *by the company in association* with Fairfield Mabey. Work will take two years to complete and is due to start next week.

The by-pass leaves the exist*ing A1 near Scremerston, about* two miles south of Berwick, and rejoins it near the northern outskirts of the town. It will include three roundabouts, five priority junctions and a new 0.5-km single-carriageway link with the existing A1.

Consulting engineer acting for the Department of Transport is Bullen and Partners of Croydon, Glasgow and Durham.

Wimpey-Jacobs in Indonesia

SAID TO to be the biggest of its kind east of the Gulf is the Badak Liquid Natural Gas Plant cooling water piping system project located in East Kalimantan, Indonesia, for which the Wimpey-Jacobs Joint Association announces a contract award from the Huffco Group, Houston, Texas.

Scope of the services of the first contract for this Association include project management, engineering and design, to replace portions of the existing carbon steel salt water piping system with reinforced fibreglass piping, thereby eliminating corrosion. The existing system consist of piping from 24 to 72 inch diameter.

The Badak plant is at Bontang Bay, a natural harbour six miles north of the equator in the jungle area of East Kalimantan and is the first LNG plant in Indonesia. It has been in operation since 1977 and supplies a portion of Japan's natural gas needs, providing nearly 160 trillion BTUs of energy a year.

Wimpey-Jacobs jointly provides owner's single-source turnkey responsibility for project management, engineering, procurement, construction and start-up operation for hydrocarbons projects worldwide.

At home

A design and build contract valued at £1.2m has been awarded to Wimpey Construction's Edinburgh office for a factory at Kirkton Industrial Estate, Arbroath, for Keith Blackman. This is a purpose-built unit for the manufacture of large centrifugal and axial fans.

Rich Estates of London has awarded a contract in excess of *£1m for the construction of* ware house units at the Acorn Industrial Park, Crayford, Kent. This comprises 21 small warehouse units of steel frame construction with brick and curtain wall cladding.

New museum

INSPIRING WORK for Sir Robert McAlpine is a £1½m job calling for the building of the National Museum of Photography Film and Television in the theatre section of Wardley House, Little Horton Lane, Bradford (originally built as part of a 1964 McAlpine contract).

Buzby busier at Heathrow

WORK IS now underway on the building of a new computer-controlled automatic telephone exchange with a capacity of 3,000 extension lines at Heathrow Airport.

The exchange is being constructed on a road island at the sound end of Terminal 2 at the entrance to the cargo terminal tunnel and the building in which it will be housed will cost £600,000. The telephone exchange equipment (said to be the latest in computerisation) will cost just under £2m.

Completion of the building should be next month and the exchange will be operational from November 1983, opening with 816 exchange lines.

Contract for the building works has gone to W. S. Try, and exchange installations will be carried out by Thorn Ericsson Telecommunications.

LOMBARD

The query on productivity

BY SAMUEL BRITTAN

THE CURRENT recession has been notable for the number of anecdotal reports of new *attitudes* to productivity and restrictive practices and of companies achieving agreements to realistic manning scales which had eluded them over decades of negotiations. The best evidence that this is true is that corporate profits and cash flow, though very depressed, have held up much better than most people feared. Otherwise the combination of large wage increases — far exceeding those of competitor countries—*in every wage round* before the present, and a rising exchange rate, would have *slaughtered companies engaged* in exports or subject to import competition; and most of manufacturing would have been one big lame duck.

But it would still be helpful to find direct evidence of improved productivity in the overall statistics. Here there is, as always, no end of puzzles. It is best to concentrate *on manu*facturing not because it is sacred, but because it has been at the sharp end of the recession and tends to respond more quickly to economic changes than domestic services. Productivity is also easier to measure in the manufacturing sector.

Employment

Manufacturing output has itself been *on a declining trend* since the early 1970s. Between the two *peak* years of 1973 and 1979 output *fell* by 4 per cent. But as employment fell still more — by nearly 9 per cent—output per man rose by over 5 per cent. Average hours worked fell by 3 per cent, so output per man hour grew by 8 per cent — *giving a trend annual growth of* productivity per hour of 1 to 1½ per cent.

At first sight it looks as if the recession has reduced productivity. Manufacturing output per man fell by 4 per cent between 1979 and 1980; and by the first quarter of 1981 the total fall compared with the 1979 average was over 5 per cent. Because of the sharp fall in hours, output per man hour in the first *quarter of this year fell to only* about 1 per cent below the 1979 average — less bad, but hardly a *productivity miracle*.

Nevertheless experienced readers of the statistical tea leaves can still find evidence of improvement. The key to the mystery is that productivity *normally rises in boom years and* falls in recession ones. However hard employers try to reduce overmanning, there are always overhead workers, ranging from repair and maintenance people to office staff.

The *National Economic* Development Council has tried to examine not just how productivity has changed, but whether it is higher or lower than one would expect at this stage of the business cycle. It has estimated *an equation for productivity* on the basis of the last upturn, covering the years 1976 to 1979 inclusive. The main influences were the level of output and a modest upward time trend.

If this equation is projected forwards, a startling result emerges. It underpredicts the level of output per man achieved by the first quarter of 1981 by nearly 11 per cent and the level of output per man hour by 14½ per cent.

The pessimists will reply that productivity also grew more *than predicted in the previous* recovery years of 1975 and 1971. The improvement was held, but not added to, in the subsequent recoveries. But at this point, it is worth recalling that we are no longer talking about productivity itself but errors in predictive equations; and the whole Nedo method of estimating pro*ductivity equations* from short periods of years with recessions left out, leaves me with the most profound misgivings.

If one leaves the equations and looks at the productivity chart, certain broad conclusions emerge. Output per man hour was on a fairly sharply rising trend in the decade up to *1972-73, in spite of the spate of* commentaries on the "British disease." Since then the rise has become a slow crawl. Whatever the trend, output per hour normally suffers a check in recession. But in the present one the dip has been very short-lived and is now virtually over. The question is whether when recovery comes productivity will return to a more steeply rising trend or not. For it is this *which will determine whether* or not recent sacrifices have been in vain. My guess is that there *has been a lasting improvement*, but on present figures it is still only a guess.

Trademarks—flattery and frauds

BY MARJORIE STILING

ACCORDING to Charles Caleb Colton (1780-1832), imitation is the sincerest form of flattery, but he should have added that imitation of trademarks is fraud and an indictable offence.

Anyone found guilty of such a transgression today, can think himself lucky not to have lived in 16th century France where the punishment for using someone else's trademark was the loss of the right hand. In England in 1597 two goldsmiths were nailed by their ears to the pillory for putting false marks on gold plate. Fourteenth-century records of the Rhineland Palatinate in Germany report the hanging of an inn-keeper for passing off inferior wine as genuine Rudesheimer.

Yet in spite of the far less barbaric penalties meted out today, recent reports show it is difficult, sometimes impossible, to trace the perpetrators of infringement of trademarks. Goods bought in *good faith* and on the strength of what appears to be a reputable trademark are sometimes discovered, too late, not to be the real McCoy; the trademark or brandname having been deliberately copied *as near to the original* as to deceive.

If only the suspected culprits could be traced, it might be an interesting experiment, merely to prove their innocence, if they had to recount in public the origins of the trademarks in question, and produce records to support their tales.

Truth being stranger than fiction, copywriters working for Japanese, Chinese and others who steal trademarks, might well have their imaginations *overstrained and still not come* up with anything to match the facts.

Take for instance the trademark Almay which symbolises completely unscented cosmetics, screened for impurities and allergy-tested. Would a new manufacturer of similar products risk calling them Almay if he knew no more about them than that the name Almay is owned by Almay Inc. of the U.S., and it is licensed to be used in the UK by Nicholas Laboratories of Slough? The Almay story began in the 1920s when a young Schieffelin chemist — of the American parent company, the Schieffelin Corporation — devised an eyeshadow for his wife whose skin was unusually sensitive. His name was Al. Was her name *May*?

Pirates might fare better if they tried dealing in brassieres with such intriguing names as Angel's Kiss (Gossard), and Angel Face (Kayser-Bondor) listed in the 1977 edition of the UK Trade Names from Kompass Publishers.

Gossard says that these marks,

A keen game of Scrabble during the British National Championships.

believed to have originated in the U.S., have not been used for many years.

But what romantic beginings would a man concoct for his kettles and pans if he poached the well-known Swan brandname and logo? Probably nothing as simple as the truth — that Bulpitt and Sons in its early days actually manufactured kettles and pans from Swansea tinplate and, while the company admits there is some contention as to how the name was arrived at, it is thought the name Swan was derived from the material used. At the same time it is also believed, without definite proof, that Mr Thomas Bulpitt started his career in the very early days as a licensed victualler keeping The White Swan in Little Bread Street, Birmingham, where he is known to have produced ships' lanterns and hollow-ware items in the back kitchen.

The vivid history of Bénédictine, which began in 1510, would also need a fertile imagination *to rival the truth. Thanks to its* founder Alexandre Le Grand, the trademark acquired the value so often confirmed by the tribunals; that an excellent product, different from others and not found elsewhere, must bear a good trademark which not only helps to distinguish the product but gives the consumer a guarantee of the producer. The older and more well-known and distributed the trademark is, the more it acquires economic and judiciary value.

During the second half of the 19th century, the Benedictine Society complied with all the necessary formalities in countries which proclaimed a law protecting trademarks. So it seemed ironic to learn recently from *le Secrétaire Général at Fécamp*, that because defending a trademark is a battle which never stops, the present *tableau de chasse* of Bénédictine that one is able to admire in the museum of counterfeiters, will never be complete.

What legend would a counterfeiter *invent for the thin black* dog with white spots which adorns Reeves artists' materials? The marketing manager regretted he could offer me no assistance concerning trademarks, then added that that the mark goes back to the first pages of registered UK trademarks. So who *registered for Reeves*? Was he as enthusiastic as a member of the Bass staff who, in 1875 when the Trade Marks Registration Act was introduced, spent the night on the steps of the registrar's office to be first to register when the office opened the following morning? Had the man from Reeves kept him company, or had he had his night's sleep before joining *those others* reported pushing in the registrar's hall?

Who, but the genuine owners of the trademark, would not be stopped in his verbal tracks if he had to recount in detail the whole wonderful saga of Scrabble? *Inventor* Alfred Mosher Butts of New York first called his word game It, then Lexiko and later Criss-Cross-words.

The game, which had been unsuccessfully hawked around for nearly *20* years *before* it suddenly took off in 1952—five years after the inventor had let James Brunot—a man he had met just before World War II and given one of his popular home-made sets—take over the game on a royalty basis, and it had acquired yet another name —Scrabble.

In 1971 James Brunot *sold* outright all trademarks, copyrights and claims for his Scrabble name in the U.S. and Canada to Selchow and Righter. At the same time he sold complete Australian rights to T. R. Urban, and British and other rights to J. W. Spear.

On doing so, Brunot summed up in a *sentence the whole* case against imitators "What we were selling was primarily the trademark, and that's the most valuable part of the whole thing."

Mill Reef is Charity Day prize

RACING

DOMINIC WIGAN

THE ARTHRITIS and Rheumatism Council will be the charity to benefit from the 1981 Charity *Day at Ascot on September 25.*

It is hoped that more than £100,000 will be raised on that *day when there should* be a healthy sprinkling of high class horses in evidence for a six-race programme of which the Taylor Woodrow Diamond Jubilee Charity Stakes is to be the feature.

That £10,000 added race for three-year-old fillies is sup*ported* by the 1½ mile *Daniel* Prenn Stakes, the five furlongs William Hill Handicap, the *Kensington Palace Stakes over* the same trip, the seven furlong Mornington Stakes and the 1½ mile Douglas Butt Stakes.

The charity—which will benefit through the gate and a *raffle, through advertising and* the sub-letting of boxes—will be relying heavily on what *should* be a lively auction.

Here the most sought after item will undobtedly be a nomination to *Mill Reef* submitted by Mr Paul Mellon, that popular American philanthropist.

Other nominations being auctioned on this now well-established charity day include a Shirley Heights given by Lord Halifax and others to Star Appeal, Scorpio and Brunie.

For those not after a nomination to a leading stallion there are plenty of other interesting items to be had at the auction which will be held over lunch *before racing.* These include a diamond brooch, a pair of George III silver spurs hallmarked 1798, a Jean Walwyn bronze and a framed Susan Crawford print.

Provided that the weather does not let them down, the Arthritis and Rheumatism Charity Day workers should see a six figure response to their efforts into combatting two diseases which will leave only one in 50 of us unaffected in an average lifespan.

WINDSOR

2.30—Master Bunbury
3.00—Martialis
3.30—Aventura
4.00—Ibtihaj***
4.30—Prince Bless**
5.00—Fast Trip*

TV/Radio

BBC 1

† Indicates programme in black and white

6.40-7.55 am Open University (Ultra High Frequency only). 9.55 The Wombles. 10.00 Jackanory. 10.00 "Champion, The Wonder Horse." 10.40-11.00 Take Hart. 1.12 pm Regional News for England (except London). 1.15 News. 1.30-1.45 Bod. 3.30 Home on Sunday with Patience Strong. 4.18 Regional News (except London). 4.20 Play School. 4.45 Hong Kong Phooey. 4.55 Newsround. 5.05 Go With Noakes. 5.35 Roobarb.

5.40 News.
5.55 Nationwide (London and South East only).
6.20 Now Get Out of That.
6.50 Toyah at the Rainbow.
7.20 Freebie and the Bean.
8.10 Panorama.
9.00 News.
9.25 The Monday Film: "The Women's Room" starring Lee Remick.
11.38 News Headlines.
†11.40 *Phil Silvers* as Sergeant Bilko.

All Regions as BBC1 except as *follows:*

Cymru/Wales—1.30-1.45 pm Dan Draed. 6.20-6.50 Salmo the Leaper. 7.10-7.20 Newyddion. 12.05 am News and Weather for Wales.

Scotland—1.10-1.15 *pm* The Scottish News. 5.55-6.20 Reporting Scotland. 12.05 am News and Weather for Scotland.

Northern Ireland—4.18-4.20 pm Northern Ireland News. 5.55-6.20 Scene Around Six. 12.05 News and Weather for Northern Ireland.

England—5.05-6.20 pm Look East (Norwich); Look North (Leeds); Look North (Newcastle); Look North West (Manchester); Midlands Today (Birmingham); Points West (Bristol); South Today (Southampton); Spotlight South West (Plymouth).

BBC 2

6.40-7.55 am Open University.
11.00 *Play School.*
4.50 pm Open University.
6.55 Football Association Coaching.
7.20 One Hundred Great Paintings.
7.30 Return Call to Brass Tacks.
7.40 News Summary.
7.45 Under the Weather.
8.10 Secret Army.
9.00 Iris Williams.
9.40 Brass Tacks.
10.25 Cowboy's Flute (cartoon).
10.45 Newsnight.
†11.30 Laurel and Hardy in "Below Zero."

LONDON

9.30 am Larry the Lamb. 9.40 The Legend of Los Tayos. 10.30 Animated Classic. 11.15 Rocket Robin Hood. 11.35 Razzmatazz. 12.00 Chorlton and the Wheelies. *12.10 pm Rainbow. 12.30* Me and My Camera. 1.00 News, plus FT Index. 1.20 Thames News. 1.30 The Spinners. 2.00 The Riordans. †2.30 Monday Matinee: "Moment of Danger" starring Trevor Howard, Dorothy Dandridge and Edmund Purdom. 4.15 Ready Woollen and Able. 4.20 Runaround. 4.15 Into the Labyrinth. 5.15 Botanic Man.

5.45 News.
6.00 Thames News.
6.35 Crossroads.
7.00 The Krypton Factor.
7.30 Coronation Street.
8.00 The Crowther Collection.
8.30 World in Action.
9.00 The Member for Chelsea.
10.00 News
10.30 How We Used to Live.
11.00 Stonestreet—Who Killed the Centrefold Model?
12.25 am Close: "Sit Up and Listen" with Professor Archie Roy.

All IBA Regions as London except at the following times.

ANGLIA

9.40 am The World We Live In. 10.05 Young Ramsay. 10.55 Cartoon Time. 11.10 Pro-Celebrity Darts. 11.35 Stingray. 12.30 pm Botanic Man. 1.20 Anglia News. †2.00 Monday Film Matinee: "Madeleine," starring Ann Todd. 5.15 Worzel Gummidge. *6.00 About Anglia.* 6.30 Survival. 11.00 In Concert: Nazareth. 11.30 Hammer House of Horror. 12.30 am Reflection.

ATV

9.25 am The Nature of Things. 10.20 Call it Macaroni. 10.45 Patterns. 11.10 *Young Ramsay.* 12.30 *pm Botanic* Man. 1.20 ATV News. †2.00 The Monday Matinee: "Quartet." 5.15 Worzel Gummidge 6.00 ATV News. *11.00 ATV News. 11.05 Hammer House* of Horror. 12.05 am Something Different.

BORDER

9.35 am The Lost Islands 10.00 Focus on Wildlife. †10.25 Laurel and Hardy. 10.50 Between the Tides. 11.10 Thunderbirds. 12.30 pm Botanic Man. 1.20 Border News. 2.30 Monday Matinee: "Where Angels Go, Trouble Follows." 5.15 Worzel Gummidge. 6.00 Lookaround Monday. 6.15 The Pet Show. 6.30 Diane Solomon at the Wolsey. 11.00 Hammer House of Horror. 12.00 Border News Summary.

CHANNEL

12.30 pm Botanic Man. 1.20 Channel Lunchtime News. What's On Where and Weather. 2.00 The Monday *Matinee: "Monte Carlo or Bust."* 5.15 Worzel Gummidge. 6.00 Channel Report. 6.10 Chopper Squad. 10.28 Channel Late News. 11.00 Hammer *House of Horror.* 12.00 *News* and Weather in French.

GRAMPIAN

9.55 am First Thing. 10.00 Tarzan. 10.45 Al Oeming: Man of the North. 11.10 Call it Macaroni. 11.35 George Hamilton IV. 12.30 Botanic Man. 1.20 North News. 2.00 Monday Matinee: "The Battle of the River Plate," starring John Gregson, Anthony Quayle and Peter Finch. 5.15 Worzel Gummidge. 6.00 Summer at Six. 6.30 Target Bowls. *11.00* Barney *Miller.* 11.30 Father, Dear Father. 12.00 North Headlines.

GRANADA

9.30 am Evolution. 9.50 Cool McCool. 10.15 Tarzan. 11.00 Sesame Street. 12.30 pm Botanic Man. 1.20 Granada Reports. 1.30 Music from the Flags. 2.00 Monday Matinee: "Quartet." 5.15 Think Tank. 6.00 Granada Reports News. 6.10 Old Salts. 6.30 The Addams Family. 10.30 Out of School. 11.00 Hammer House of Horror. 12.00 George Hamilton IV.

HTV

9.45 am Survival. 10.10 Fangface. 10.35 Out of Town. 11.00 Sesame Street. 12.30 pm Botanic Man. 1.20 HTV News. 2.00 Disney Cartoons. 2.15 Monday Matinee: "Drums Along the Mohawk," starring Claudette Colbert and Henry Fonda. 5.15 Worzel Gummidge. 6.00 Report West. 10.28 HTV News.. 11.00 Hammer House of Horror.

HTV Cymru/Wales—As HTV West except: 12.00-12.10 pm Ffalabalam. 1.30-2.00 Hamdden. 4.45-5.15 Sêr. *6.00 Y Dydd. 6.25-7.00 Report Wales.* 11.00 The South Wales Echo Snooker Tournament. 11.30-12.00 Superstar Profile.

SCOTTISH

9.55 am The National Environment. 10.20 Adventure Time. 10.30 England *Their England. 10.55 The Lost Islands.* 11.20 Pro-Celebrity Snooker. 12.30 pm Botanic Man. 1.20 News Headlines and Road and Weather Report. †2.00 The *Best of British "A Tale of Two Cities,"* starring Dirk Bogarde. 5.15 Worzel Gummidge. 6.00 Scotland Today/ Crimedesk/Festival '81. 6.30 Mork and *Mindy.* 11.00 Late Call. 11.10 Hammer House of Horror.

SOUTHERN

9.30 am Focus on Wildlife. 10.00 Tarzan. 11.30 George Hamilton IV. 12.30 pm Botanic Man. 1.20 Southern News. 2.00 Houseparty. 2.25 "Run *a Crooked Mile," starring* Mary Tyler Moore. 5.15 Worzel Gummidge. 6.00 Day by Day, including Southsport. 11.00 Hammer House of Horror.

TYNE TEES

9.20 am The Good Word. 9.25 North East News. 9.30 Untamed Frontier. 9.55 Beachcombers. 10.15 The Beatles. 10.25 Mumbly. 10.35 Stingray. 11.00 Sesame Street. 12.30 am Botanic Man. 1.20 North East News and Lookaround. †2.00 Monday Matinee: "Devil on Horseback," starring Googie Withers and John McCallum. 3.45 Stars on Ice. 5.15 End of Part One. 6.00 North East News. 6.02 Sale of *the Century. 6.30 Northern Life* 10.30 North East News. 10.32 The New Avengers. 11.30 How We Used To Live. 12.00 Four Great Gifts.

ULSTER

12.30 pm Botanic Man. 1.20 Lunchtime. 2.30 Monday Matinee: "Trottie True," *starring Jean Kent.* 4.13 Ulster News. 5.15 Worzel Gummidge. 6.00 Good Evening Ulster. 6.30 Here's Boomer. 10.29 Ulster Weather. 11.00 *George Hamilton IV.* 11.30 Bedtime.

WESTWARD

9.35 am Sesame Street. 10.35 The Lost Islands. 11.00 Summer Sport. 11.00 Wattoo Wattoo. 12.30 pm Botanic Man. 1.20 Westward News Headlines. 2.00 The Monday Matinee: "Monte Carlo or Bust," starring Tony *Curtis and Peter Cook.* 4.12 *Gus* Honeybun's Birthdays. 5.15 Worzel Gummidge. 6.00 Westward Diary. 10.32 Westward Late News. 11.00 *Hammer House of Horror.* 12.00 Faith for Life. 12.05 am West Country Weather and Shipping Forecast.

YORKSHIRE

9.30 am Sally and Jake. 9.40 World We Live In. 10.05 Herculoids. †10.30 Laurel and Hardy in "The Finishing Touch." 11.00 Tatters. 11.55 Wattoo Wattoo. 12.30 pm *Botanic Man.* 1.20 Calendar News. †2.00 Monday Matinee: "Yangtse Incident," starring Richard Todd. 4.00 Hear Here. 5.15 *Worzel Gummidge.* 6.00 Calendar (Emley Moor and Belmont editions). 6.35 Happy Days. 11.00 Hammer House of Horror.

Radio Wavelengths

BBC Radio London 1458kHz, 206m & 94.9vhf

Capital Radio: 1548kHz, 194m & 95.8vhf

RADIO 1

RADIO 2

RADIO 3

RADIO 4

BBC Radio London

London Broadcasting

F.T. CROSSWORD PUZZLE No. 4,654

ACROSS

1 Salad vegetable soldiers serve up (6)
4 Schedule putting silver finish to article (6)
8 One who applauds a bell-ringer (7)
9 Give comfort to the cabinet (7)
11 Female supporters with lots of business details to get down to (5, 5)
12 *Everyone* separately considered (4)
13 Turn a corner in a bishop's hat (5)
14 Article to mail and a note from renegade (8)
16 Bird with its head in front *of a half-door* (8)
18 Theologian accepts ice cut into cubes (5)
20 Catch sight of secret agent from the East (4)
21 Fetters donkey, but to do it could be injurious to health (5-5)
23 According to the letter it is a misprint of a letter (7)
24 Ask, by way of many sheets of paper (7)
25 One who forestalls a hoaxer (6)
26 Some French intend to lower in status (6)

DOWN

1 Governor has the principle right (5)
2 Money put down for sediment (7)
3 Courses taken in reverse order, but it's all confection (9)
5 Make a total profit but it's obscene (5)
6 North American perfume coming into being (7)
7 *Called* to a stranger, "It's apportioned!" (9)
10 Fight a great deal? It's all *rubbish! (5-4)*
13 Maltreat with a rod, but it's a rest for painters (9)
15 I must appear in munitions to make a regulation (9)
17 Rustic source of fodder? (7)
19 Come and put inside to calculate (7)
21 *Cause to fret when gas is* installed in restaurant (5)
22 Scriptures turned up all *correct and spread* (5)

The solution to last Saturday's prize puzzle will be published with names of winners next Saturday.

FINANCIAL TIMES

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THE ARTS

Radio 3

National Youth Orchestra

by ANDREW CLEMENTS

A regular and invigorating *visitor to the Proms in* recent years, the National Youth Orchestra on Thursday gave a programme that was well-designed to display its best qualities. For al its past success in standard symphonic territory, the NYO is most compelling in scores that demand a mixture of flamboyance and close attention to detail, conceived in bright primary colours.

So in Berlioz and Stravinsky the orchestra and its conductor, Charles Dutoit, were well-matched. But Mr Dutoit also introduced the giant-sized orchestra (nearly 150-strong) to Xenakis; *Empreintes* was written in 1975 and is scored for an appropriately massive ensemble of triple woodwind, quadruple brass and 60 strings, with an independent part for each player. It is built simply and effectively out of the most basic elements: a slow string glissando, a brief unison phrase, and a scattering of repeated notes. But after an impressive beginning and a congested central climax, the ending is sudden and unexpected, in a *flurry of stuttering* brass and woodwind. What promises to be one of its composer's most attractive orchestral works *eventually suggests only an* introductory sketch, the opening gestures of something that requires far more extensive and profound treatment.

The National Youth Orchestra launched itself into the microtones of Xenakis as enthusiastically *as it had earlier* presented the *Roman Carnival* overture, the slow introduction distinguished by a creamy cor anglais *solo. Woodwind detail* was also a constant delight in Stravinsky's violin concerto. The soloist was Kyung-Wha Chung, a close *match in enthusiasm* for her young accompanists, and thrilling in the outer movements, with stingingly accurate *harmonics and luscious* lower-string tone. But strangely she was less effective in the central pair of arias. Poise and singing tone *for once deserted* her, and the relief with which the final capriccio was attacked, dispelling lyrical uncertainty with *baroque confidence*, was almost palpable.

The complete *Petrushka* ballet also gave fullest rein to *the NYO's talents. Mr Dutoit* concentrated rightly on the work's proliferating detail, always projected as larger than *life, with marvellous solos,* especially from trumpets, flute and clarinets. There is more pathos to be extracted in an *ideal* performance but scarcely any more excitement or immediacy.

Albert Hall/Radio 3

Birtwistle

by PAUL DRIVER

Saturday's Promenade concert featured the boldest programme planning of the season. Orchestras were dispensed with: two exotic ensembles from abroad — Les Percussions de Strasbourg and the fabulous Thai Classical Music Group of Srinakharinwirot University, Bangkok — had been invited instead: and their rich, startling entertainments were bridged by a work of Messiaen's (always a dependable composer when it comes to cultural synthesis): *L'Ascension* in its 1934 version for organ solo, well performed by Timothy Bond in the second of the three parts of the concert.

Les Percussions de Strasbourg, an adventurous group founded in 1961 and as much interested in research into, as performance on, the contemporary range of percussion instruments, gave *the UK première of Harrison* Birtwistle's *For O, for O, the Hobby-horse is Forgot*, a work written for them four years ago and *deferred from last* year's cancelled Proms. The title is a rather marvellous excerption from Hamlet's speech before the dub-show enters: *dwelling on his* father's memory, he observes that that is the hobby'horse's epitaph. Birtwistle's piece — *inspired by writing incidental* music for a National Theatre production of *Hamlet* — is hardly epitaph-like in spirit. Its atmosphere inevitably suggests some more elemental dramatic source such as the Greek tragedy. Its connection with *Hamlet* is not in fact a particularly precise one: perhaps an involvement with the cogs and wheels of any other play in production could have provided Birtwistle with the necessary stimulus.

But as Arnold Whitall pointed out in his programme note, the frequently silent gesturings of the six percussionists (using mostly unpitched instruments, drums, metal blocks, whips) convey the idea of a dumb-show, while the solo function of two players, as against the chorus function of the other four, is to be seen as a representation of the Player King and Queen from *Hamlet's* particular dumb-show. The piece begins and ends (and much of its middle is occupied) with periods of silence: it can have made relatively little sense for radio listeners yesterday. The Strasbourg musicians vividly responded to the purely histrionic tasks often demanded of them. When at the start they finally produced sounds, it was with beguiling invisible strokes; at the end two players lifted whips and poised them for action — but thereupon the strange piece ceased.

Birtwistle *might be* accused of baiting the Philistine in so brazenly filling nearly half an hour with no more than ordered *thwacks and crashes.* Yet *its* musical concept is the logical outcome of many of his previous compositions and they *provide it with an enriching* context: those who know *Verses for Ensembles, Nenia, agm, Silbury Air, Bow Down,* will have found *the present "ceremony"* newly resonant with ideas about gesture, ritual and silence. And those who don't still cannot have *failed* to be *fascinated,* hypnotized by such a spectacle, brutal yet exactly measured. Anybody could *not* have written it. Who but Birtwistle could?

Petworth Festival

The third Petworth Festival in West Sussex opens on September 12 *with a concert of* works by Richard Rodney Bennett, Dvorak and Britten given by the Brighton Youth Orchestra.

It runs for one week and also includes a visit from the Yehudi Menuhin School whose programme includes the Elgar violin sonata which the composer wrote while living at *nearby Fittleworth.*

The first performance of a hitherto unknown fugue by *Mozart will be given in a concert* on September 17; Christopher Hogwood will play harpsichord and clavichord *music in the square dining room* of Petworth House on September 18; and the festival concludes with a concert by the *BBC Singers on September* 19 including works by Elgar, Holst and Delius, as well as a commissioned piece by Edward Cowie.

Robinson College, Cambridge

Architecture

Cambridge compromise

by COLIN AMERY

"Unto every one that hath shall be given" . . . should really be the motto for Cambridge University, not to mention Oxford. Back in 1974 the millionaire David Robinson decided to give the University a new college. His generosity was compared with that of King Henry VI — not for as long as anyone could remember had a gift on such a scale been promised from one benefactor.

No one really considered that the benefaction might be better spent in places where the need for further education and new colleges *was more acute* — indeed it was not the kind of offer you turn down lightly.

In architectural terms the gift *represented a wonderful opportunity* to build a college of the latter part of the 20th century. There had been other opportunities. *Cambridge has had five* new colleges since the war, Fitzwilliam, New Hall, Churchill, Darwin and Clare Hall (the *latter affiliated to Clare but in*tended to be independent as a graduate institution). The largest of these was Churchill and the architect Sir Richard Sheppard opted for a traditional college courtyard form with staircase access to the rooms.

The brown bricks of *Churchill* and its monumental entrance gate and courtyard gardens full of Henry Moores and Hepworths now seem to be a rather grand memorial to the architecture that flowered in the 1960s but was born in the 1930s. This was the kind of human scale environment that architects were unable to persuade public authorities to build as housing after the war. Churchill College is a reminder that the Welfare State seldom achieved the kind of buildings that were available to the privately endowed older universities. That is why if you are asked to show a foreign visitor the best of new architecture in Britain you are going to take him to Oxford and Cambridge before you risk creeping around some of the new Towns or skimming the edges of some of the new university campuses.

How has Robinson College *added* to the amazing collection of buildings that makes up Cambridge University? To begin, some history. A two stage competition was held: first, ten architects were asked to submit ideas and then four practices were chosen to prepare their designs for the final stage. The final four practices were MacCormac and Jamieson, a young London firm; Cadbury-Brown Metcalfe and Cunningham with the late Eric Lyons; Gillespie Kidd and Coia — a Scottish organisation famous for some brilliant churches — and Fielden and Mawson — a distinguished East Anglia practice.

The scheme that won the approval of the trustees and the University was the design produced by Gillespie Kidd and Coia. It is the project that has grown up on the site in Grange Road to the west of the city centre and near the Backs. To date only the first stage has been built—Mr Robinson offered to pay for a college for 600—*the first buildings house* 350 students.

The initial impression of the new college is that it does not *resemble a traditional college* in any way. A large "L"-shaped construction hugs the edges of the site and this has meant that the occupancy of the buildings is at a high density with four floors of student rooms piled on top of the more public rooms and a large basement car park. After noting the large size and mass of this single edifice, the other striking feature is the colour.

For a Cambridge building it is uncompromisingly red brick. The entrance to the college is up a brick ramp at the corner of Grange and Herschel Roads. Here the symbolism of the old college begins and, to my mind, it is where the compromise starts as well.

The entrance is marked by a *tower of bricks and a flag pole* and a trellis-type entrance gate. In fact, most visitors and the majority of undergraduates probably *sweep into the car park* beneath the building and find their way up from the basement. Once you are past the porters *you are on the newly* created ground level that has made a series of courts sit on top of the lower service floor. These are not very agreeable spaces, feeling rather hemmed in by the mass of surrounding brick walls. The desire to be a recognisable "college" has caused the architects tremendous difficulties. They have felt obliged to emphasise the chapel and the library as separate elements, but they have really designed one large hall of residence that includes within it all the circulation spaces and the rooms with special functions.

The linear quality of the *whole building means* that there are no big, relaxed spaces that you can take a deep breath in and feel that you have arrived at Robinson College. Even in the chapel one feels rather squashed by the narrowness of the space and overpowered by the strong colours and splodginess of John Piper's window.

This window is a large one and much is made of it inside and out with its stepped shape echoing the stepping back of the piles of residential terraces. As a stained glass designer Piper remains a puzzle — here he makes no response to the very geometric character of the building. Instead he has poured his colours in a flood of greens, yellows and blues across the whole window.

The architects of this college are Scottish and much of their inspiration has come from the work of the great Scottish architect Charles Rennie Mackintosh. Jack Coia, who sadly died recently, was described as the finest architect from Scotland since Mackintosh. He, and his partners, have given Cambridge a heavy dose of the Mackintosh style in the library and the appearance of much of the detailing of Robinson College. In the library their touch is masterly. Book stacks, windows, tables and balustrades are used in an arts and crafts way to build up to a total interior *experience through the individual* elements.

On the garden side of the college the appearance of the *building, although less man*nered than the internal spaces, is forbidding. It looks like a private fort, sternly detailed *and almost machicolated. Most* of the student rooms are within a couple of feet of the public footway which climbs through *the building at all levels.* Windows are large and students have complained that it is impossible to concentrate, even going as far as to say that the college has been designed for voyeurs.

Robinson College is an attempt to design a college in a new form — as a medium rise, high density block, to use a bit of architects' jargon for a moment. It is a brave compromise, a tight maze of a building that reaches at times an almost manic pitch of concentrated geometric excitement, but nowhere does it achieve a calm sense of an academic enclosure.

On a suburban site of over 12 acres how pleasant it would have been to spread the buildings more generously among the trees and to have accepted that Cambridge is a low and level place where gardens grow and people like to live near the ground. The bastion-like qualities of the new college belong to a tightly knit Border town or even in a densely overcrowded inner city area — which is perhaps where Mr Robinson's millions are more needed after all.

Stratford Festival appointment

Richard C. Dennison has been appointed director of production at the Stratford, Ontario, *festival and will assume his new* position on August 31.

Initially, he will work with John Hayes who was formerly executive producer of the festival and who has come out of retirement to assist in training a new director of production.

Edinburgh Festival

New Tavener & Bainbridge

by DOMINIC GILL

During the London Sinfonietta's 10th anniversary season three years ago, when John Tavener's first, and still his best, work, *The Whale*, was set side by side in the same *programme with his latest offer*ing, a 40-minute cantata called *Kyklike Kinesis*, I wrote of the downward arc which it seemed to be his music had described over the decade — an amiable and characteristically fluent but increasingly predictable decline into soft-centred sentiment.

Set beside the robust and vigorous writing of *The Whale*, the new cantata seemed no more than an indulgent essay in cheaply perfumed high-camp, a maundering methodist confessional, cross-dressed in sentimental high-church kitsch. The downward curve has now hit rock bottom. Tavener's most recent work, *Akhmatova: Requiem*, scored for orchestral strings, brass, *percussion and* two voices, given its premiere by the BBC Symphony Orchestra under Rozhdestvensky in *the Usher Hall last Thursday*, lasts for nearly one hour and is so musically threadbare as to seem virtually non-existent as *a finished composition.*

Tavener takes as his text the greater part of a poem called "Requiem" by the Russian poet Anna Andreevna Akhmatova (1889-1966), interspersed with some fragments of Russian Orthodox liturgy. Akhmatova's theme is the misery and suffering of those who lived under the Stalinist regime: but the *sequence is not so much* explicitly political in tone as a despairing cry in the name of all humanity. The solo soprano part—bravely and commandingly taken by Phyllis Bryn-Julson—carries the main, almost the sole, weight of the setting; the baritone soloist makes four brief interjections. Around these two the instruments in various groupings make half-hearted attempts at accompaniment and comment: here a twizzle of strings, there a peal of trumpets or the thump of a drum. The effect is everywhere *half-begun, unfinished,* tentative, without an ounce of concentration or an inch of focus: not one measure of it *comes within an arm's length* of matching (or mirroring or illuminating) the passion and desolation and darkness of Akhmatova's words. The work of Russia's greatest woman poet, by way of poetry readings and an exhibition, is this year one of the festival's worthiest subsidiary themes: but Tavener's homage, sincere though it surely is, does her no service at all.

The other new work of the first festival week, played by Capricorn at a morning concert in the Queen's Hall, was more compelling, more inventive, and a great deal less pretentious. *Simon Bainbridge's Landscapes and Magic Words* takes Eskimo poetry as its point of departure, and seeks out the spirit of the words rather than setting them directly. An ensemble of 10 instruments with soprano are all amplified: from a drone of modulated *Stimmung*-like vowels (the players also use their voices) emerge a succession of spare, smoke-curled melodies (notably for voice and for cor anglais). The hollow hum of blown bottles and the whine of rubbed glasses—amplified, a remarkably effec*tive and delicate* evocation—is an ostinato accompaniment silenced by the rising of the sun and a luxuriant, verdant climax. *A new section, and* a new ostinato additive rhythm, chatters like a flock of Phil Glass birds: another moves the *music to still* warmer, Latin American climes. The bare, frozen sonorities return—a recapitulation, in context, maybe a shade too obvious, too easy? But the point is made, simply and cleanly. The fine soprano soloist was Lynda Richardson. The composer conducted.

Book Review

What about the workers?

by MICHAEL COVENEY

A Good Night Out by John McGrath. Eyre Methuen. £3.95, 126 pages

John McGrath (b 1935) is a little odd, you may think, to be messing around in fringe theatres. *He has been writing* plays since 1958, the best known of them *Events While Guarding the Bofors Gun.* He was one of the first scriptwriters *of Z Cars* and claims to have learnt a lot by having his screenplays chopped to pieces by film moguls. He has been on Harry Saltzman's yacht. He is gifted, intelligent, charming and Marxist.

This book is based on lectures he gave at Cambridge University in 1979. It comes with the imprimatur of a foreword by Raymond Mortimer. Without any sign of sour grapes, McGrath explains why he turned his back on the establishment media (although he still works occasionally in television as both writer and director). His view *of good popular art does not* include *Salad Days* or *My Fair Lady* Nor does it include David Storey or Edward Bond. The *Royal Court writers he derides* as (in Storey's case) tickling the bourgeois fancy with condescending slices of working class life; or (in Bond's) indulging in "holy writing" with one eye on posterity.

Brecht and Piscator are respected as theorists but denounced as dealers in pedagogics. Their successors, says McGrath, include people like David Hare and Howard Brenton whose work, however sympathetic to the masses, is doomed because it expresses itself in the language of "high cultural theatre."

Phrases recur in this book—"mediating reality," "the working class movement"—which I do not understand. There is, however, not a trace of smugness and a rare and exhilarating determination to argue through to the end, to delve into work processes, to reply to other writers' views on popular culture and to celebrate the line of radical work McGrath sets out to honour and emulate.

His 7:84 Companies (he has run the Scottish one since 1971 and founded the English in 1973) claim precedents in such figures as Joan Littlewood, Ewan MacColl and Peter Cheeseman. He even goes back, reverentially, to the Blue Blouse movement in Russia in the 1920s and ropes in, for contemporary European analogies, Dari Fo, Roger Planchon and Ariane Mnouchkine—such is the opposition to the reality of the way we live as "mediated" by the BBC, Conor Cruise O'Brien, Sir Peter Hall and all the theatre critics.

On the other hand, McGrath is humbly aware of the dangers of "Meccano" ideology, the patronising fringe and safety of any sort. Like John Arden, and for similar reasons of incompatability, he remains outside the London subsidised centres of excellence. He learns more, he has said, from a bad night in Bootle. I have to take McGrath's word for it that the Scottish working class does—or might—respond to his Marxist analyses, sweetened with jokes, songs and as much bawdy as may be allowed by his own anti-sexism.

I have twice seen the company on home ground and the difficulty is that, on neither *occasion, did I feel* that the audience was being more "seriously" entertained than they would have been by Bruce *Forsyth or The Sound of Music.* McGrath invokes the spirit of Billy Connolly and Max Boyce in his argument for "localism" *in theatre. The point* at which, however, he is doing the audience a favour as opposed to satisfying his own political soul, is *indecipherable. McGrath, of* course, knows this and spends much time recounting how an indifferent, beer-swilling club audience in Glenrothes was "turned round" by the sheer vigour — and political fervour —of the company. Such triumphs obviously buck him up on the long, gruelling haul to socialist utopia. This is an important and fascinating book, a cut above the smug predictability of most fringe theatre literature and written out of a blazing commitment and long years of experience.

Moray House Gymnasium, Edinburgh

The Girl from Andros

The third of the foreign visitors to Edinburgh, completing a generous first week for the Festival, was the National Theatre of Romania. They have brought a farce by the Roman playwright Terence dating from 166 B.C., *Andria*, or as it is billed here, *The Girl from Andros*. It was Terence who wrote "I am a man, and I think nothing human alien to me," but if there is anything so deeply philosophical in this play you and comically wild Romanian won't notice in this wildly comic, and comically wild, Romanian production, which seems to belong as much to the circus as to the theatre.

The story concerns the difficulties *of a young man* called Pamphilus, whose father, Simo, wants him to marry a girl of his own class. Philumena, though he is in love with a more frolicsome girl (from Andros) called Glyceria. Philumena (of whom we see little) is in love with Amphilus's shy friend Charinus. That is all we need know of the plot, *except that it ends happily* with the discovery Glyceria is well-connected after all and the four young people are properly *mated. With a series of basic* situations available, all the director has had to do is to invent enough comic business to keep us amused. Grigore Gonisa was formerly a radio director, and believes that "the meaning of the word becomes less important than what each actor does with it, and language becomes subsidiary to action." It's only fair to say that I couldn't follow much of what each actor did with Terence's words in Romanian.

It is helpful if, as soon as possible, you can be sure who is who. This is who: Simo (Mihai Malaimare) is an old man in a baggy white suit who sometimes wears a symbolic white beard hanging round his neck, but not *always. Pamphilus* (Bogdan Stanoevici), young and beautiful, wears green overalls; his servant Davos, in grey, *might be a star soccer player.* Glyceria (Tamara Cretulescu) is funny rather than romantic: she wears glasses and is usually *pregnant*. One should also recognise Philumena's father (Raducu Ictus), who wears a fancy waistcoat; and take note of Radu George, who has two servant parts, and is a clown in the true line of Grock.

To describe the goings-on would be, in a phrase I have borrowed before, to decant champagne. Lots of it is simple circus fun.

B. A. YOUNG

ATHLETICS BY JAMES FRENCH

Shutting the door on hypocrisy

ATHLETICS, the world's oldest sport, is the last major participant and spectator sport to come to terms with professionalism. Top athletes have long been paid — in differing ways—and hypocrisy rules. But there are widely differing ideas on what should be done.

On Tuesday and Wednesday in Rome next week, a record 115 member-nations of the International Amateur Athletics' Federation will spend *two days debating "eligibility"* before watching most of the greatest athletes competing in the World Cup. Eligibility appears to be a euphemism for more serious matters.

One key switch proposed by a representative working party *that included officials from East* Germany, Yugoslavia and Kenya, is to drop the word amateur from the rules—and *to concentrate on eligibility.*

Britain and the U.S., two countries most in favour of open athletics, are among a minority who have the word amateur in the name of their national association.

Two important reforms would establish a new category of international meetings (the *calendar has got badly out of* hand) and give national associations wider powers to subsidise athletes for training, housing, education, travel — and even food.

Athletes would also benefit from endorsements and advertising — provided the money is channelled through the national association.

One hot potato is the suggestion that prize money, with a *possible upper limit of $1,000,* could be paid. But the IAAF council suggests that this should be debated, but not voted on, *sent back to the work*ing party for reconsideration before next year's Athens congress.

*John Holt, IAAF general sec*retary says: "We are hopeful that most of our recommendations will go through — we have not heard any grumbles. We have worked to achieve a *fairer deal for top international* athletes and to bring together countries with different philosophies.

"We have tried to be realistic and to bring about a much healthier situation. We have to have sensible controls, but I believe that administrators have an interpretive role rather than one of imposing decisions on athletes."

Britain, which led the way to open tennis and abolished amateur/pro distinctions in soccer, is backing the proposals. "I am an athletes' power *man,*" says David Shaw, secretary of the British Amateur Athletics Board. "We had a couple of strong motions of our *own, on prize money and allow*ing athletes to be paid for endorsements and advertising. But we have happily withdrawn *them to give full support to the* working party proposals."

However, Britain's top athletes have their reservations. Paul Dickinson, secretary of the International Athletes' Club says: "*The report does not give the* full story — only the tip of the iceberg. It will be interesting to see the reaction from Eastern bloc countries.

"Athletes do want a say in running the sport, and we do feel that international officials have been dragging their heels, but it must be said that the BAAB and the IAC have been working well together.

"We would like to see open athletics — but I do wonder where all the money could come from. It would be nice to break even at the end of the year — *many athletes are £2,000 out of* pocket.

"We should like to see improved control — particularly *on eliminating drug-taking.* Perhaps a system of licensing athletes is the answer."

The Rome congress can bring *about some great improvements* — but it is going to be damnably difficult to please everybody.

CRICKET BY TREVOR BAILEY

Trophy provides tingling finishes

THE NATWEST TROPHY semi-finals provided exceptional *excitement and tingling last* over finishes which limited overs cricket can, but by no means always does, produce. In both matches, the side batting second just scrambled home after their opponents looked to have won.

Northants beat Lancashire in the gloom after Tim Lamb and Griffiths, a strong candidate for the worst number 11 on the circuit, had put on an unlikely 13 runs and, even more improbably, had lasted eight overs.

They owe their victory very *largely to Lamb, an intelligent* cricketer who bowled very well, took a fine catch, and then assumed control as a batsman *when all seemed lost.*

I felt Lancashire, with so few runs to play with, made a mistake to treat Tim as a bats*man, deliberately offering him* a single, which gave him confidence, instead of trying to bowl him out.

At Derby on the second day, when batting was a little easier *than on the first, Essex* not only allowed Newman and Taylor to make 10 runs to level the scores in the final over, and to win through having lost fewer wickets, but Phillip panicked and missed an easy run out off the last ball which would have given his team victory.

The fact that Northants and Derbyshire—neither among the strongest nor the most colourful teams in the competition—have reached the Lord's final underlines that the difference in ability among the 17 counties is slight. It also emphasises the *shortage of international class* players apart from overseas' imports.

Admittedly, Northants were *seriously weakened* by the absence of the injured Willey who brings stability to a suspect middle order. So Lancashire *could,* and *probably should,* have won on this occasion. Nevertheless, an examination of that Lancashire eleven raises several intriguing questions.

O'Shaughnessy and Reidy appeared no more than reasonable minor county bowlers. Are they really the best third and and fourth seamers in Lancashire? Does D. Lloyd possess the control needed for a spinner in one-day cricket?

Although Fowler is a most promising left-hand batsman, who provided one of the few impressive innings in the match when most of the batting was indifferent, and the basic technique of so many looked suspect, is his wicket-keeping up to the necessary standard?

England has required a new *opening bat against Australia* to replace the out-of-form Gooch who has had such a disastrous Test series but should return re*freshed for the India tour.*

Two obvious candidates were the Northants first wicket pair, Larkins and Cook.

*Against Lancashire, the for*mer was less impressive—lbw playing across the line, the same basic fault which has brought the downfall of Gooch so often this summer.

Cook is a correct, competent opener, much respected by the umpires, and sounder than his colleague who has been chosen *for the sixth Test starting on* Thursday, but less naturally gifted.

The other England player to be omitted at the Oval is the elegant Gower who has been caught in all his ten Test innings this summer—usually because he has failed to move his feet sufficiently, and plays too far from his body.

His place goes to Parker, after a productive season with Sussex, who in their short-sighted greed for domestic success in two competitions turned out such a weakened side *against the Australians on* Saturday that it was an insult to the tourists, their own supporters, and the sponsor, Holt *Products*. Haven't they yet realised that first class cricket without commercial sponsorship is dead?

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Monday August 24 1981

The IRA wins a round

THE ULSTER constituency of Fermanagh and South Tyrone is *suc generis:* for a start, the majority of its population is Catholic. There has also been a long record of allegations of political intimidation, and there was last week a remarkably high turn-out for a by-election in August. The moderate Catholic party—the SDLP—failed, after internal wranglings, to put up a candidate, so that the broad choice for the electorate was between the Unionists and the representative of the H Block prisoners, effectively the Provisional IRA.

Extreme

Those qualifications should be borne in mind before it is concluded that what happened in Fermanagh and South Tyrone is simply a reflection of the polarisation of opinion in Ulster and, to some extent, in the Irish Republic over the H Block issue. Fermanagh is still an extreme case.

Nevertheless, it must be granted that Mr Owen Carron, the anti-H Block candidate, won a notable victory. The Unionists this time—unlike in the previous by-election in April—were fighting as a united force. Mr Carron himself lacks the personal appeal of his predecessor, the late Bobby Sands. There were also one or two minor candidates in the field who could, and did, take away some of the Catholic votes. Yet Mr Carron actually increased the anti-H Block majority.

Brinkmanship

The question now, for all concerned, is where do we go from here. The outlook appears to be in many way as bleak for the H Block prisoners as it is for the Government in Britain or for the Government in Ireland. The hunger strikers have achieved a propaganda coup, but at a heavy price. Ten of their members are already dead and there have been some signs that both a number of priests and relatives of the prisoners would like the strike called off. Yet, from a militant point of view, the logic of events is that the deaths must go on. Only thus can the prisoners maintain the initiative.

Equally, however, there can be no way in which the British Government can grant the prisoners' demands under duress. Various mediation attempts have been tried and failed. None is in train at the moment, except possibly what might arise from the forthcoming report of the International Red Cross. What has developed is an exercise in brinkmanship which, we would still guess, the British Government will win.

Yet some thought has to be given to the consequences of this narrow kind of victory. British policy in Northern Ireland has again come to a standstill. The latest proposals by Mr Humphrey Atkins, the Secretary of State, for a consultative council were practically stillborn. In the north the SDLP looks to have destroyed *itself as a political force. Anglo-*Irish relations have deteriorated while anti-British sentiment in the Republic is visibly mounting. Not least, the Provisional IRA is now openly speaking of the "destabilisation of the south," a process which is already under way. There is at least one by-election to come in the Republic where the anti-H Block vote could be the crucial factor.

Priority

There is also the question of reaction abroad: it is quite likely that Mr Carron will shortly depart for the U.S. further to whip up American sentiment against alleged British atrocities. It is a remarkable fact that the British Consulate-General in New York no longer flies the flag for fear of IRA reprisals.

All those are serious matters, the consequences of which will grow with time. All that comes out of Downing Street, however, is a refusal to confirm or deny whether Mr Atkins will be replaced in a possible Cabinet reshuffle. That is no way to govern a province. What is needed now is the strongest possible statement from the Prime Minister herself that henceforth the Irish problem will be regarded as a priority.

It would be wrong to give way to the prisoners' demands for improved conditions without their first calling off the strike. But it is no less wrong to have no other policy towards Ireland, north and south. At the moment, the only people making the running are the Provisional IRA.

U.S. policy in a British dilemma

LAST WEEK the dollar was marked down sharply and consistently in the currency markets, in response to some further signs of softening in the U.S. economy, and a flurry of official statements looking forward to an easing of interest rates. There can be no doubt that everyone involved would like to see a reduction in rates, whose present level is now seen as a threat to the whole Reagan economic strategy.

However, both the Administration and the monetary authorities face some hard decisions before an enduring cut can be made, consistent with other policy objectives.

Obstinate

Such an analysis may be thought to have a British bias, since British policy was stretched on very much the same rack during 1979 and 1980; but two facts so strongly echo British experience that the comparison is nearly irresistible. Firstly, the Federal borrowing requirement is now seen to be well above Budget because of falling revenues; secondly, corporate borrowing in the bond market has slowed to a trickle.

These are the two main symptoms of what has become known in British markets as crowding out. This is admittedly an over-simple description of a complex phenomenon; but it can be an obstinate one, and the implications for interest rates are disturbing.

The slow down in corporate funding is in itself a symptom of hope rather than of fear. The promise of falling interest rates in the future, and the fact of falling inflation at present both help to persuade corporate treasurers that it would be worse than rash to commit themselves to long-term obligations at current bond rates, although short-term credits are substantially more expensive. This backward sloping yield curve is itself a confirmation that the market regards the present peak in rates as temporary. However, a similar pattern persisted in London for nearly two years on largely disappointed hope.

There are three reasons why this pattern can be unexpectedly hard to break. First, soft market and high debt service charges tend to inflate corporate credit demand, now rising in the U.S. at an annual rate of 23 per cent. Second, the pause in funding throws the weight of borrowing on to the banks and money markets, inflating the broadly defined money supply, as the Fed points out.

Finally, an unexpected increase in Government borrowing not only tends to fill any void in the long-term credit market, but undermines morale. The Administration has now admitted that Federal borrowing is threatening to overshoot by more than $20bn, and the unbudgeted borrowings of various Federal agencies are also running at a high level. The Administration is seeking further expenditure cuts and Mr David Stockman, the Budget director, has publicly declared his view that defence spending, a central Reagan objective, should not be sacrosanct. A debate on such a subject so early in the life of the Reagan administration can do little to reassure the markets. Again, however, the echoes of British experience are deafening.

Investment

There are, of course, highly significant differences between U.S. and British institutions and prospects. The U.S. economy is highly resilient, as is shown by the massive investment now being carried out by the U.S. motor industry. The Administration appears likely to show a far more effective grip on public spending, as well as a red-blooded appetite for confrontation with public sector unions, so that the biggest disappointments may be on the revenue rather than on the expenditure side.

What should also be significant is that the Fed is officially aiming at a narrowly-defined monetary target rather than a broadly-defined one, since it is the broader aggregates which tend to become inflated in circumstances such as we have discussed. However, under pressure of the ingenuity of the U.S. financial markets, the Fed has been citing the growth of the broader measures to justify its continued restrictive stance. America's financial partners would feel reassured if both the Fed which has already had to help out the thrifty institutions with relatively cheap loans, and the Administration showed a keener appreciation of the dangers of pursuing mutually inconsistent objectives.

OPEC IN GENEVA

How a 'consensus' fell apart

By Richard Johns, Middle East Editor

THE ORGANISATION of Petroleum Exporting Countries has "agreed to disagree" before now. But never before has a meeting collapsed like the one in Geneva last week. The occasion was even more unique because Opec has never before convened a conference actually to discuss cutting prices.

The meeting was called by Nigeria, hard hit by the continuing slump in demand and by high Saudi production, to re-establish a common price structure, following a 2½-year period of disarray. The event took place on the condition set by Saudi Arabia, the organisation's heavyweight and moderate, that agreement should be assured in advance. There is therefore confusion following the failure to reunify prices.

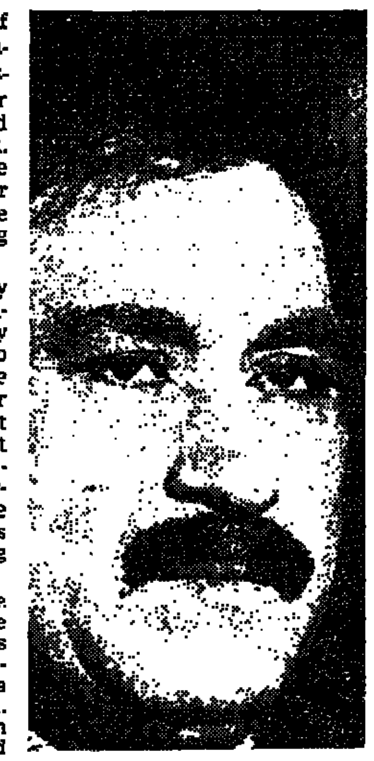
The Kingdom's terms were well-known. They were that the basic reference for all varieties of crude oil should be rationalised at a level of at most $34 a barrel for its own Arabian Light. That would be midway between the $32-$36 spread allowed under the muddled compromise reached last December at an ordinary ministerial conference in Bali in Indonesia.

The stance taken by the Kingdom involved a large concession, as well as a degree of steely determination. Throughout the haphazard escalation of prices since the beginning of 1979, following the Iranian revolution, Saudi Arabia has consistently sought to restrain the upward drift. This year, by maintaining high production, it has begun to achieve its aim.

At last week's meeting Sheikh Ahmed Zaki Yamani, the Saudi Oil Minister, pointed out that members had profited substantially from the recovery of the dollar, the currency which oil prices are denominated. Last Friday night he expressed his belief that the correct price for Arabian Light, the traditional "marker" for all other varieties, should be $28. His calculation was based upon the pricing formula recommended by the Opec ministerial committee on long-term strategy (which he chaired), if it had been applied from the beginning of 1974.

In the wake of last week's meeting, the chief delegates were talkative enough. But none was willing or able to explain why reunification had not been achieved. In the event Saudi Arabia could not confirm the cast-iron assurances that it had sought—and apparently received—after intensive diplomatic pressure. Not the least surprising aspect of the *debacle was the fact that the* formal confirmations of harmony anticipated was undermined mainly by Venezuela, a founder member of Opec, and the inspiration behind its formation, which has traditionally been almost sentimentally attached to conciliation.

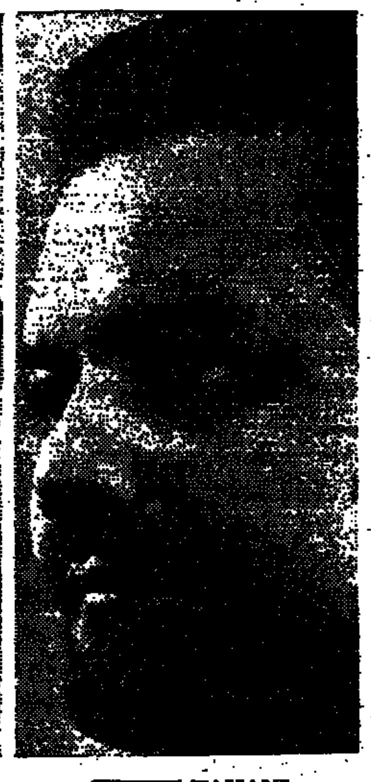
From the outset, the extrovert and friendly Sr Humberto Calderon Berti, Venezuelan Minister of Mines and Hydrocarbons, had insisted that there



TAYEH ABDUL-KARIM
Joker in the pack

SHEIKH ALI KHALIFA
Reader of Mark Twain

CALDERON BERTI
Election considerations



SHEIKH YAMANI
Diplomatic pressure

was no reason why his country should reduce its price, because its exports had not been affected by slack demand or high Saudi output.

Evidently nothing concrete was agreed during the talks that Prince Saud, the Saudi Foreign Minister, held in Caracas. Sr Calderon, a contender for the presidency at the next Venezuelan election, agreed the prices should be unified, but felt unable to renounce the $36 that he regarded as the marker for his country's selling rates.

The Saudi negotiators seem to have overlooked this potential rock in their path. They could not, perhaps, envisage a founder-member upsetting the proposed agreement because of electoral considerations.

They were also sceptical about the actual Venezuelan price, which their own calculations put at $35.

In practice any precise estimate is difficult to make. About half of Venezuela's exports are in the form of refined products. A large proportion of the rest is accounted for by heavy fuel oil. In the context of the international market, Venezuela is insulated by its proximity to the U.S., the destination of about 60 per cent of its shipments, and by long-established contractual arrangements. It is also a reliable supplier, which did not play the spot market in 1978-79. All this explains why Venezuelan exports are still running at the desired level of 1.8m barrels a day, despite a world glut.

In contrast to Venezuela's surprisingly tough position Nigeria at the very start of the consultations revealed its desperation—amounting to "panic," according to some delegates. Its exports have plummeted from 1.8m barrels a day in the early part of this year to as little as 600,000 b/d; throughout the summer Nigeria has been coordinating its policy with fellow African members of Opec—Algeria, Libya and Gabon. As recently as the last week of July when the four had held a meeting in Tripoli it committed itself to maintaining the premium price for its crudes in the range of $38.72-$40.02.

But no sooner had the talks *in Geneva begun than Alhaji* Yahaya Dikko, Nigerian chief delegate, made it clear that his Government intended to cut its top price to $35 or less a barrel in line with the $32 charged for Arabian Light. The $3 differential reflects the higher quality of Nigerian oil, together with the producer's nearness to the main consumers.

> The chances of realignment at the end of the year look slim. Sheikh Yamani argued that the oil price should be subject to demand like any other commodity, and thus go up or down. Most other members of Opec do not see it that way.

At the other extreme Iran, represented by newly-appointed Minister of Oil with apparently little knowledge of the subject, namely Mr Mohammed Gharazi (who defied convention by wearing an open-necked shirt), was true to its revolutionary form, and rejected any reduction in the price agreed by the majority.

The rest of the membership, however, were genuinely hopeful of agreement. Softening a little, Venezuela suggested $34 to $36 a barrel. Then another proposal emerged almost spontaneously: a compromise at $35.

Only Saudi Arabia and Iran were unwilling to reunify at this level, according to delegates. Sheikh Yamani felt he had no choice on Wednesday night but to refer the idea back to his royal masters, King Khaled and Crown Prince Fahd. Predictably, the response was negative. The Kingdom had gone to Geneva expecting confirmation of its diplomacy, not haggling.

By Friday lunchtime "nine or 10 countries" were prepared for reunification at $34, according to Sheikh Ali Khalifa al Savah, Kuwaiti Minister of Oil. Libya and Algeria seem to have been persuaded, albeit with reluctance. Iran, Venezuela and Iraq were voicing reservations but Sheikh Yamani was confident that they could be overcome. Looking relaxed, he left the meeting for half an hour. On his return, he found that the nearly-formed consensus had fallen apart.

Everyone seems to have felt that Iran could be safely ignored; but Iraq proved the second joker in the pack. In Sheikh Yamani's absence Mr Tayeh Abdul-Karim, Iraqi Minister of Oil, is understood to have suddenly suggested that further discussion of the whole issue should be postponed until the next Opec ordinary conference scheduled for Abu Dhabi in December. The debacle followed.

There can be no certainty that Saudi Arabia will stick to Sheikh Yamani's stated intention of keeping its oil price at $32 throughout 1982. The economic well-being of the West and the long-term market for Opec oil remain the Kingdom's prime concerns. However, political factors, such as lack of progress towards a solution of the Palestinian problem or rejection by the U.S. Congress of the sale of AWACs to Saudi Arabia, could obviously affect the equation.

Thus it was that although the Saudi decision to peg its price appeared a defiant challenge to other members of Opec, it was promptly qualified by a gesture of "goodwill"—the decision to cut Aramco output in September by 1m barrels a day.

The reduction should be seen as a reflection of the Kingdom's sensitivity to the hostility or opposition of other Arab members of Opec, particularly Iraq, which has closely aligned its policies with Saudi Arabia over the last three years.

It remains to be seen how far the continued disarray will force down the average price of a barrel of Opec oil. This was recently calculated by Petroleum Intelligence Weekly to be $34.25 a barrel. That is some 50 cents down on the first quarter of 1981, indicating the pressure of slack demand.

Sheikh Yamani's characteristic confidence is that the average will fall further. Nigeria, for a start, is expected to bring down the price of its top quality crude from a little above $40 to as little as $34.50-$35.00 a barrel.

It is difficult to see how Libya and Algeria can avoid following their fellow African producer at least part of the way. Libya's output has slumped to an unacceptably low level of 450,000 b/d, compared to a level of 1.4m b/d that it had planned, and 700,000 b/d that it would like for budgetary needs. Algeria is in a stronger position because of more binding contractual commitments, but cannot feel complacent. Notwithstanding its intransigence, Iran must be forced to offer substantial discounts. The same is true of Iraq.

For a year at least, and probably two, members of Opec—and indeed all oil producers—face the prospect of an erosion in the real value of their per barrel receipts. Members of Opec who refused reunification of prices last week may well regret quibbling over $1 and losing the opportunity of stabilising the price at $34.

Even so, the chances of realignment at the end of the year look slim. Sheikh Yamani argued that the price of oil should be subject to demand like any other commodity, and thus liable to go up or down. Most other members of Opec do not see it that way.

For them a vital principle is at stake, directly related to the origins of Opec, which was founded when the major oil companies unilaterally cut posted prices in the late 1950s. They believe that receipts should never fall, neither in absolute nor relative terms. But Saudi Arabia is as opposed as ever to discussing with fellow producers its level of output, which is crucial for stabilising the market.

As a result of a failure to reunify prices, however, adoption of a system of indexation recommended by the ministerial committee has, ironically, been set back again. Under the proposed mechanism prices would be adjusted quarterly to take account of inflation in industrialised countries, fluctuations in the value of the dollar against other currencies, and the growth rate of members of the Organisation for Economic Co-operation and Development.

There was no certainty that indexation would be collectively approved, anyway. Iran, Libya and Algeria had reservations about the document, more or less finalised a year ago. They objected to a system that might work against the financial interests of member countries. The appreciation of every barrel of oil by some 15 per cent, despite the market glut, as a result of the strengthening of the dollar, would not have been possible under the mechanism envisaged.

For Opec it was a distressing week. But the organisation will survive. It has proved itself capable of withstanding differences not only over pricing and production policy, but also over vicious pan-Arab and nationalist politics. Last week's debacle was not as traumatic as the split on prices at the end of 1976, which lasted into the middle of the following year, when Saudi Arabia and the United Arab Emirates stuck to an increase of 5 per cent rather than the 10 per cent set by other members. As Sheikh Ali Khalifa al Sabah said last Friday night—recalling the words of Mark Twain—"Reports of our death are greatly exaggerated."

MEN AND MATTERS

The beasts of Heathrow

It is a sad day when an organisation dedicated to the humane treatment of creatures at London's Heathrow Airport is obliged to close down.

But in little more than two months' time, the RSPCA is to shut its small Heathrow hostel which has looked after millions *of animals, birds and fish over* the past 30 years.

The hostel was set up to ensure that beasts were properly packaged for shipment and it quickly achieved the respect of all airlines operating at Heathrow. Volume climbed from 100,000 a year when it opened to over 1m in 1966, before falling to about 250,000 last year.

To some extent, the RSPCA is a victim of its own success. The major factor in the reduction of volume, it seems, has been its campaigning for *stronger controls on animal* transportation. The much higher cost of exotic animals, stricter legislation on imports and exports and quarantine regulations have further reduced numbers which, although still appearing large, are made up predominantly of consignments of thousands of small birds and fish.

The closing of the hostel does not mean that controls on animal transportation will no longer be enforced. From November 1 the RSPCA is *moving in with the quarantine* centre for incoming animals at Heathrow which is operated, oddly enough, by the City of London Corporation.

Drawing the loin

Provocative advertising posters often catch more than the eye, as regular riders of the London Underground can attest. The latest one to keep LT's cleaners on the run publicises the new James Bond film "For Your Eyes Only" by making much of the lisson legs and scantily clad buttocks of model Nancy Stafford.

Miss Stafford has similar effects on Americans and so some U.S. newspapers, not wishing to offend their family audiences, have indulged in a little defacing of their own.

The Boston Globe, Dallas Times Herald and Salt Lake City Tribune were among those cropping the buttocks out altogether, leaving star Roger Moore framed only by Stafford's legs. The Nashville Banner added a little more material to the strip of knitwear around Stafford's hindquarters, while the Philadelphia Bulletin ran the ad in its original form, changed its mind, and inked in what appeared to be a bikini bottom. Most distinctive of all was the sartorial preference of the Philadelphia Post Gazette, which painted on to Stafford a pair of black hot pants.

Tender spot

The International Monetary Fund is finding it something of an uphill struggle to establish its paper currency, the special drawing right, but it has found some unexpected allies in the shape of Vietnam, Guinea-Bissau, Zaire and—to send you running for your atlas — Sao Tome and Principe. These four sturdy little economies are among those which have opted to maintain the exchange rates of their dongs, pesos, zaires and *dobras against the* SDR.

Of the total of 14 SDR-linked countries, it would be fair to say that none — with the singular exception of Iran—is known for trend-setting on the world's financial markets. The IMF prefers not to be drawn into discussion of the subject. If its staff were to comment, they would probably point out that it is still early days for such an instrument. Only this year was the SDR simplified to reflect a manageable group of five currencies instead of 16. They *might also reflect sadly on the* affection which larger countries now have for floating exchange rates — which only a decade ago were anathema to the orthodox thinkers in IMF head quarters at 19th Street NW Washington.

The IMF men might however be kind enough not to gloat that while only 14 IMF members set their exchange rates against the SDR, a solitary one, Gambia, sets it against sterling these days. Even that arrangement must be considered to bear at least a tinge of uncertainty, as whispers come of a closer merger with Senegal — whose exchange rate is fixed against the French franc.

RIT of summons

An announcement today from St Swithin's Lane will mark the end to RIT's search for a new chief executive to head up its subsidiary Target Life, the in*surance company which RIT* digested when it swallowed Dawnay Day last year.

The new man is John Stone, marketing manager at Pru offspring Vanbrugh Life. Stone has been at Vanbrugh for seven years, during which it has grown from fledgling status to a healthy creature with £250m of funds under management. He will be well remembered there as the architect of the Loanback scheme, a gimmicky but highly successful arrangement enabling the self-employed to unlock their pension contributions through a guaranteed loan. Stone now claims to have a new marketing ploy of potentially similar impact up his sleeve—which would do no harm to Target's attempts to put a bit more zest into its drive for a larger share of UK life and pensions business.

Stone's arrival comes just a few weeks after the internal promotion of Barry Sack to the top spot in Target's unit trust subsidiary. The South African born Sack has been at RIT for over eight years, mainly as general manager of Anglo Leasing, and cheerfully confesses to having started the new job with little knowledge of the unit trust business. That, however, is being quickly remedied as he gets to work sprucing up Target's downmarket image.

"If they hadn't called off the strike, would we have noticed the difference?"

Triptease

Perhaps wishful thinking was behind the Bank of England's choice of the code letters, RTCA, for its page of entries in the Reuter Monitor interest rates *display system. Or so, at least,* begins last week's most esoteric City joke on the subject of the new monetary base control system. The Old Lady dislikes money market operators' practice of arbitraging between overdraft and market rates, known as "round tripping," because it can inflate the money supply. The suspension of MLR has not in itself abolished the problem and so, the theory goes, the Bank has taken to subliminal exhortation: "Round Tripping Can't 'Appen."

Observer

Anthony Moreton looks at the problems created by a move to encourage private development

Enterprise zones: a questionable start

Increased buzz of criticism

FIRED WITH enthusiasm, Sir Geoffrey Howe unveiled Britain's enterprise zones in his 1980 Budget. He believed businessmen would seize the financial incentives to prove private enterprise works.

For his pains the Chancellor has been rewarded by a process that has taken 15 months to get the first zone operating. He has also been criticised by the very people he thought would be on his side.

He offered them a 10-year rates holiday in certain areas, 100 per cent capital allowances on new commercial and industrial buildings, and speedy council decisions.

It was planned that these concessions would attract new businesses and help rejuvenate the zones by putting up new factories and providing jobs in areas with high unemployment. The idea was that free enterprise could do what local authority planning could not.

The 11 areas were carefully *chosen for regional balance.* One each to Scotland, Wales and Northern Ireland. The rest were distributed among the Midlands, the North West, *North East and Yorkshire with* only one in England south of Birmingham. There might have been more, but Sir Geoffrey was aware that the experiment was *open-ended, in that no-one had* any idea of the eventual cost, and he did not want to commit an excessive amount to the scheme.

Public reaction was muted at first but as the day neared when the first zone became operational the buzz of criticism increased in volume. There were complaints that the 11 zones offered unfair trading conditions and would *divert* resources and that financial incentives would be better deployed helping industry as a whole.

The time taken to get zones off the ground should not have come as a complete surprise to as practised a politician as Sir Geoffrey. The British parliamentary process tends to thwart speedy action: the Local Government Bill, which gave legal entity to the zones, had a difficult passage through Parliament.

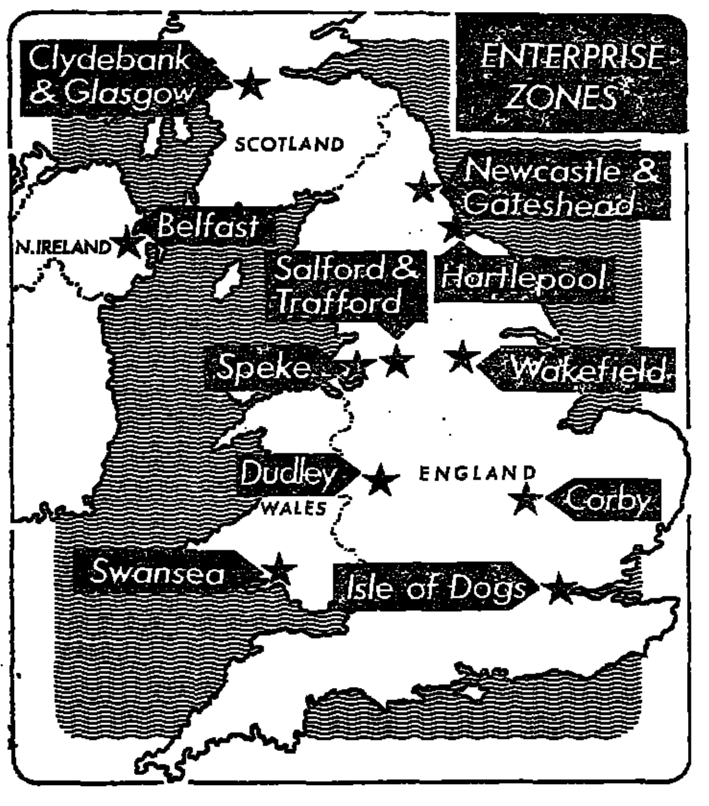
The result was that the first zone, Swansea, came into operation on June 11. By tomorrow seven more will be off the ground — Clydebank / Glasgow (*where the zone straddles two* districts), Corby, Dudley, Newcastle / Gateshead, Salford / Trafford in Greater Manchester, Speke in Liverpool and Wakefield.

Two of the remaining three, Hartlepool and Belfast, should begin in mid-October and the Isle of Dogs in London early next year.

The weight of the criticism stems from the fact that the Government still does not know what it has committed itself to financially.

Its own unofficial estimate is that it will have to reimburse the local authorities for lost rates on buildings already in existence within the zones to the tune of £10m over the ten years and that the total rates reimbursement bill — which will take into account buildings still to be put up — will come to about £50m at current prices. Most independent estimates think this an extremely conservative figure.

It has been calculated that a medium-sized concern operating in a zone, now paying rates of £65,000 a year, could save around £1m over the decade if the rate bill is compounded for inflation at 10 per cent a year.



One of the critics, the Enterprise Zone Action Group in Manchester, claims that four out of five firms moving into the Traford/Salford zone have come from with the locality simply to take advantage of the cheaper costs. The average distance the relocated firm has moved, it claims, is just 4.83 miles.

Criticisms such as these are difficult to counter because there is little factual evidence yet. But the impressions of the local authorities suggest they are wide of the mark.

The level of inquiries is high. In Wakefield, which opened for business on July 31, the council is receiving 20 inquiries a month. Previously, if it got 20 a year it would have considered itself to be doing well.

In Swansea more than 400 inquiries have been received and they are reaching the city's Guildhall at the rate of 30 a week. The letters and phone calls are not merely after small sites: One developer asked about a 100-acre site.

Some authorities admit that many of the inquiries come from companies already operating within the area but the zones also seem to have created interest over a much wider area. Corby reports that a lot come from "a fair distance away" and Wakefield that they come from "all over the country."

Nor is it true in Swansea's case that the zones will only appeal to distribution industry just interested in storage facilities, a commonly - heard criticism. Among the concerns which have taken premises are a printer, an ice-cream manufacturer, a fabricator of radiators, a heavy plant operator, an optical equipment company and a clothing manufacturer.

The crucial time for the zones will be in the next three years. *The Government concedes that* if companies do not move in within this period to take full advantage of the financial concessions there will be little incentive left to operate within their boundaries.

It would appear that developers have got the message. At Corby, Bradbury Construction of Nottingham, has taken a 2-acre site and is committed to another 2½ acres: at Wakefield another property developer, J. and J. Fease of Halifax, has snapped up a 5-acre site *that had been on the market for* years before the site was included within the zone.

Mr Nigel Cutts, managing director of Bradbury Construction, said his company had held off any involvement at Corby until the zone was designated. Of the two medium-sized buildings it is putting up, one of 15,000 sq ft and the other of 20,000 sq ft, one is likely to be taken for a manufacturing/ distribution concern and prospects for letting the other are good.

The best indicator of industry's attitude might come from Associated British Foods which in early July announced plans for a £15m flour mill in the Corby zone.

ABF had been considering putting up a £10m chemicals plant in Corby long before the zone was announced but the decision on the flour mill was a direct consequence of the creation of the enterprise zone. "Had it not been for the zone we should almost certainly not have gone to Corby," the company said.

Ten weeks is too short a time in which to make firm judgment, but it is important to remember that the Government sees enterprise zones as a means of rejuvenating run-down inner-city areas. Newcastle/Gateshead, Dudley and Hartlepool may not be Toxteth or Brixton but they are places from which *industry has migrated, leaving* many social problems behind.

Much of the Speke area of Liverpool, is covered by the former BL Triumph works. The *buildings alone cover 1m sq ft* and will be extremely difficult to sub-divide into smaller units. Many of the other zones face similar problems to those of Speke in that costly reclearance will be necessary before industry can get going.

The Government would like to see private institutional money coming in to finance this work but this is unlikely to happen until it can be shown that the zones are working.

The essential point about the zones is that they are experiments. The British do not always take kindly to experiments.

Mr Maurice Howells, director of planning at Swansea, says that the enterprise zones are "an exciting addition to our armoury in developing inner areas and will help us to move from a manufacturing base which has fallen on hard times to a multi-business area."

If this transition is achieved elsewhere the experiment will be a success. But we shall not know if this is happening for some time yet.

Dudley fears new breed of company

SHORTLY before Mr Norman Fowler, the Transport Minister, landed by helicopter at the Dudley Enterprise Zone when it was officially opened *in mid-July, workmen were* spraying cold water on the steaming tarmac which had just been laid as a landing pad.

This was typical of the haste with which the West Midlands zone was established, a factor which has contributed to a strongly hostile faction among local industry.

Dudley, in the heart of the Black Country, is dominated by small, independent-minded companies concerned with metal processing in its many forms. *Unemployment there* is the highest in the West Midlands, at 15.4 per cent.

The concept of a zone, in the midst of a close-knit indus*trial community*, where some will enjoy advantages withheld from others—perhaps to their cost—struck many businessmen as unfair, whatever the eventual benefits.

As a result, the Dudley Industrial Ratepayers' Action Group was set up and about 500 companies signed a petition seeking changes in legislation relating to the zones, although this was never achieved.

The basis for most objections was that the zone would create a *breed of companies* with minimum overheads which could undercut competitors and devalue industrial assets in other parts of Dudley.

Mr Roger Latham, one of the council officers responsible for the zone, believes many of the worries generated by the rapid pace of events are unfounded.

Significantly, Dudley is the only enterprise zone where the land—situated on a former coal mining area and *difficult to develop—is exclu*sively owned by private industry, with the exception of an interest held by British Steel.

This has given rise to claims that premium rents will be charged and the real beneficiaries will be the developers and landowners, with the Government footing the bill *in the form of the* rates subsidy.

Industrial property rental values in the West Midlands are now severely depressed, and it is difficult to establish whether any real differential is emerging as the first factories in the zone to come on the market.

However, Mr David Quinn, *estates director of LCP Proper*ties, one of Dudley's largest developers and a committee member of the Action Group, said prices inside the zone *were now above* £2.40 a sq ft, while comparable space outside was £2.20 to £2.25 a sq ft.

"We have 400,000 sq ft of unlet property outside the zone and things are extremely difficult at present. Having built up an attractive business without outside help, we now find our competitors being subsidised," he said.

But Mr Latham says the allowances can be very beneficial if a company uses a good tax planner.

Whatever the outcome of the zones scheme, *Dudley will* gain a new industrial area on a piece of derelict land which has defied countless development efforts in the past.

Lorne Barling

Letters to the Editor

Petroleum duty

From Professor A. Clunies Ross and Dr R. Garnaut.

Sir, — Ray Dafter's article (August 11) on the difficulties of North Sea taxation relays two observations which seem to go to the heart of the matter. He cites Wood, Mackenzie in arguing that the fault of the tax system lies in its complexity and its emphasis on revenue rather than profits. He also reports that there is agreement in the industry that what is needed is a simpler tax system that is not vulnerable to the frequent changes evident in recent years.

We believe that these three requirements (simplicity, stability and a base in true profit) are closely linked. If a petroleum tax system is to be kept stable over a period of drastic changes in the price of the product, it must be designed so as bear heavily on a highly profitable enterprise and lightly or not at all on one that is unprofitable. Conventional income tax does not achieve this result to the required degree. Hence the attempt to devise additional measures such as the petroleum revenue tax. That tax's base, however, does not appear to be closely enough related to profit to respond appropriately to large price changes. Hence the past two years have seen successive alterations in the rules.

The stunning complexity of the PRT arises from its conceptual origin. The legislation reads as if the tax were intended to be one on oil revenue, but the base originally conceived appears to have been undiscounted cash flow. Like Ptolemaic astronomy, it had to undergo a large number of complications in the attempt to make it serve its proper purpose, which is to *relate* to profit. The fact that frequent legislative changes have later been required is evidence that the form of the tax has failed to *meet the test. Unfortunately* the new supplementary petroleum duty and associated changes shift the base toward revenue.

As far as is possible, the base of such a tax ought to be pure profit or economic rent, the residue that remains after all costs, including rewards required for capital and risk-taking, have been met. If such a base were used, tax could be applied to it at a high rate without impairing producers' incentives to explore, to develop sites or to extract. A 90 per cent marginal rate is *probably innocuous* provided it falls only on pure profit. By contrast a tax based on gross revenue must deter marginal extraction and investment, and one based on undiscounted net revenue must deter marginal investment.

Several quite simple methods have been devised as means of taxing pure profit alone. One *is the American practice of auc*tioning oil leases for cash sums. With enough competition, this appears to work well in circumstances of calculable risk, but it is inadequate alone in the Opec world of open-ended uncertainty.

Another method is to subsidise all of the producer's outlays and to tax all his revenue at the same rate. This would probably be ruled out on the ground that it would require the Government to bear too much of the risk, but that objection might be overcome by some form of "carried interest."

A third device is the "resource-rent tax" introduced by several developing countries over the past five years. Under this, tax is levied on the producer's net present value as it accrues after cash flows have been discounted. The rate of discount is intended to aproximate to the rate which the producer himself applies to the investment or group of investments which forms the taxable unit. The discount rate would ideally be applied to cash flows in indexed form. There is certainly room for error in fixing the discount rate. What is needed in practice is one that is neither so low as to impair oil-company interest nor so high as to arouse public concern. If a taxable unit were a single field, the right discount rate would be higher than if the unit were the whole of a company's North Sea operations.

This tax is again essentially simple. *It could well be com*bined with the American system of cash-bidding to the advantage of both. Recently senior executives of the largest *Australian oil producers, faced* with the alternative of the arbitrary and unpredictable levies to which they are now subject, have become convinced of the merits of a tax of *this* form.

(Prof.) Anthony Clunies Ross
(University of Strathclyde).
(Dr) Ross Garnaut (Australian *National University*).
Stenhouse Building,
173 Cathedral Street, Glasgow.

Multi-currency cheques

From Mr F. Hummel

Sir,—Why do banks in Britain fail to provide the facilities I enjoy with the account I have in Belgian francs at a branch of Banque Bruxelles-Lambert in Brussels?

I can draw cheques with the cheque book on that account in most major currencies. Thus I have paid hotel bills in Italy with cheques *made out in lire* and in France with cheques in French francs. I have paid for my daughter's language course in Germany with a cheque in D-marks and I have paid for books ordered in America with a cheque made out in U.S. dollars.

The local branch of my bank in Britain was not even aware that banks elsewhere in Europe provided such facilities.

F. C. Hummel.
8, The Ridgeway, Guildford, Surrey.

Planned public expansion

From Mr F. Welsh

Sir,—Like the optimist who observes that the bottle is half full, while the pessimist des*cribes it as* half empty, Mr Clayton (August 18) may be right in his statistics, but must allow a different interpretation.

Far from the expansion of the public sector draining the growth potential of the private *sector*, it is the decline of the private sector that has led to a partly compensating growth in the public sector. I wrote in *1977 that there were at that* time 3m unemployed: most were, however, still being paid to come to work. The present shake out in manufacturing in*dustry* will never lead to a recovery of employment levels. New manufacturing investments, that come with an improvement in trade and an abandonment of the dottier policies of the Government, will be capital intensive and produce few extra jobs. Such service industries as banking and insurance will share this feature, and it is only in people-intensive services that private sector employment growth can be expected.

*A reasonable level of employ*ment that will avoid gross social distress must depend on an expansion of public expenditure. And it is by no means clear that such expenditure is unproductive. The National Health Service is the biggest employer (over 1m) in Europe: it could with better levels of staffing improve our *well being* and effectivenes. A selective redevelopment of waterways would make transport cheaper: a long overdue renewal of urban *infrastructure would avoid* families being burnt to death and a renewal of the collapsing Victorian sewage system is more than overdue.

Examples could be multiplied, and it is surely the task of any competent administration to recognise the limitations of private enterprise and, while *providing proper conditions for* its growth, to push ahead with planned public expansion.

Frank Welsh.
Flass, Maulds Meaburn, Penrith, Cumbria.

Export credit insurance

From the Head of Information, Export Credits Guarantee Department

Sir,—Mr G. E. Neill (August 20) *rightly attributes* the large claims payments being made by ECGD and by other export credit insurers mainly to the impact of the world recession on international trading conditions. He then goes on to rebuke the Department for raising its premiums and taking other remedial measures, arguing that by so doing ECGD is reducing the competitiveness of *British* exporters.

May I, in reply, make three brief points. The increased premiums and other measures *recently announced* by the Department have become necessary for the very reasons that Mr Neill identifies! The plain fact is that exporting is riskier at the moment and premium levels have got to reflect this.

Even so, the Department has sought to apply these increases selectively, so that they bear most heavily where the losses *and the risks are the greatest.* For example, individual policyholders with poor claims records and particular facilities which have incurred the heaviest losses are being asked to bear the heaviest increases.

As Mr Neill observed, ECGD's overseas counterparts are facing similar problems. They are taking similar action, and in *general ECGD's facilities still* compare favourably with those of its overseas competitors.

Gerry Moggridge.
Export Credits Guarantee Department,
P.O. Box 272,
Aldermanbury House,
Aldermanbury, EC2

Tickets please!

From Mr R. Hill

Sir,—Mr Weighell (August 18) trots out statistics to prove that British Rail is not overmanned compared with other European railways. *Statistics*, of course, can be used very selectively, and I don't wish to add to the confusion by advancing any of my own.

Consumers, however — in this case train travellers — are not completely dim, do travel abroad and do make their own comparisons. On the Bundesbahn (which *still loses money*) you buy a ticket, get on the train without further supervision and have the ticket inspected on the train. On a recent *35-mile journey from* Waterloo to Wanborough, Surrey (change at Guildford), I had my ticket inspected at the Waterloo barrier, checked on the train to *Guildford, checked* again on the short journey between Guildford and Wanborough and finally it had to be handed in to the station *attendant there.*

That, to a simple non statistical member of the public, seems like overkill, and suggests that there is still some*scope for demanning.*

Roy Hill.
"Birchcroft," Glaziers Lane, Normandy, Surrey.

Rate grants per capita

From the Chairman, Local Government Finance Committee, Association of County Councils.

Sir,—Your article (August 19) commenting on the loss of grant in 1981-82 of various London authorities overlooks the fact that over the past few years there has been a very considerable switch of grant from the non-metropolitan areas, in which the population has been growing, to London, in which the population has been declining, and that the share of grant going to the inner city areas (where the population has also been falling) has been stable.

Needs and resources element/ *block grant shares 1974/75 to 1981/82*

	Non-Met areas %	Met areas %	London %
1975/76	57.3	29.4	13.3
1976/77	56.1	29.0	14.9
1977/78	54.8	30.1	15.1
1978/79	53.7	29.6	16.7
1979/80	53.4	29.6	17.0
1980/81	53.6	29.7	16.7
1981/82	54.4	29.8	15.8

This was inevitable in the previous system of grant distribution which was based solely on the principle that past expenditure was the best guide to current need. This meant that over a period of time the authorities spending most per head of population attracted larger and larger shares of grant.

It was inevitable therefore that when a more objective system of grant distribution, based on unit costs and client groups, was introduced, there would be a swing back to the non-metropolitan areas and this indeed has occurred in the current year. It nevertheless still leave London and the inner cities with a considerably higher grant per head in relation to other parts of the country than they had a few years ago.

It has not been shown by anyone that a greater expenditure *of money in the inner* city areas would have prevented the recent problems which have caused concern to everyone.

Ian Coutts.
Association of County Councils,
Eaton House,
66a Eaton Square, SW1.

Today's Events

GENERAL

U.K.: International Television Festival opens, Edinburgh (until August 27).

International Craft and Hobby Fair, Wembley Conference Centre (until August 26).

Solar World Forum—International Energy Society Congress and Exhibition, Brighton (until August 28).

Motorcycle Show, Earls Court (until August 31).

Overseas: Mr Nikolai Firyubin, Soviet Deputy Foreign Minister, arrives in Islamabad for talks on Afghanistan with Mr Agha Shahi, Pakistani Foreign Minister.

Former U.S. President Jimmy Carter arrives in Peking at start of two-week tour of China and Japan.

Organisation for African Unity seven-nation committee on Sahara cease-fire meets in Nairobi.

International Association for Hydraulic Research for Asia and the Pacific third congress opens, Bandung, Indonesia (until August 26).

International Public Works and Municipal Services Exhibition opens, Johannesburg (until August 28).

President Belaunde of Peru gives lunch in Lima for Sir Ronald Gardner-Thorpe, Lord Mayor of London.

Mark David Chapman sentenced in New York for murder of ex-Beatle John Lennon.

COMPANY MEETINGS

See Week's Financial Diary on Page 16.

COMPANY RESULTS

Final dividends: Jos Holdings. Interim dividends: Blagden and Noakes (Holdings), Macdonald Martin *Distillers*, W. N. *Sharpe* Holdings. Interim figures: Alexanders Holdings.

LUNCHTIME MUSIC, London

Piano recital by Carl Hickman, St. *Lawrence Jewry, Gresham* Street. 1.00 pm.

Organ recital by Jonathan Rennert, St. Michael's Cornhill, 1.00 pm.

Recital by Pisa Opera Group, St. Martin-within-Ludgate. 1.15 pm.

Glynwed acquires Plastimatic

Glynwed has acquired the whole of the issued share capital of Plastimatic Inc. of Norwood, New Jersey, U.S., for a cash consideration of U.S.$2.45m (£1.32m).

Plastimatic is a manufacturer of precision mechanical drive components and custom moulded parts, primarily in plastic materials. Its operations complement those of Glynwed Plastics, a UK subsidiary of Glynwed.

Leeds Dyers buys Sartor

Leeds and District Dyers and Finishers has agreed to buy all the issued share capital of Sartor (Manchester). The completion will take place on October 21.

Sartor manufactures rain and casual wear which is sold by direct mail order through advertisement in the national Press.

The total consideration is £315,000 payable in cash with £195,000 on October 1 and the balance by three interest-free loan notes maturing on October 1, 1983, 1984 and 1985.

The book value of the assets being acquired as at February 28, 1981 was £199,979. The directors have been independently advised by W. H. Robinson and Co. that the property has a current value of approximately £100,000.

Net profits for the year were £76,217.

The acquisition of Sartor, already a customer of Leeds Dyers, will provide the company products direct through Sartor's well-established mail order division.

Qualification on Nesco accounts

THE ANNUAL accounts of Nesco Investments, a holding company with subsidiaries engaged in motor vehicle distribution and service in the UK and electricity supply in Nigeria, have been qualified by auditors Arthur Young McClelland Moores and Co.

The auditors point out that the group has failed to charge depreciation on its properties, contrary to standard accounting practice, and has provided no supplementary current cost accounts.

They also say they are unable to form an opinion as to whether the investment in the Nigerian subsidiary, included in the balance sheet at £2.23m would be fully recovered and whether any liability to tax might arise on its possible disposal.

Mr Trevor Trefgarne, Nesco chairman, says in his annual statement that freehold properties have not been depreciated because they are included at a January 1981 professional valuation and properties sold since that date have in aggregate realised prices in excess of that valuation.

He adds that the directors have been advised that the replacement cost of the Nigerian subsidiary's assets, net of appropriate depreciation, would be about four times net book value. Such a figure does not necessarily imply any particular value for the investment in the subsidiary there, but it would affect a current cost accounting statement to a great extent, he says.

Mr Trefgarne says discussions have been held with Nigerian interests who approached the group to acquire its shareholding but no conclusion has yet been reached.

Nesco's pre-tax profit, excluding the Nigerian subsidiary, amounted to £365,939 for the 13 months to March 1981, compared with £425,668 for the preceding 12 months. Shareholders' funds were £5.02m (£4.08m) and net current assets £13,744 (£1.2m).

Meeting, 44 Bloomsbury Square, W, September 14 at noon.

Unitech set to benefit from growing markets

THE BOARD of electronic components and equipment maker, Unitech, is confident that the group is well positioned to benefit from the growing markets which the electronics industry serves, says Mr P. A. M. Curry, the chairman.

Although there are indications of some stability in demand returning to the UK market, the French and German markets continue to be weak. The timing of any improvement in demand and the rate of any recovery is uncertain, he tells members in his annual statement.

As reported August 5, pre-tax profits declined from £5.26m to £4.27m for the year to May 30, 1981, despite a rise in sales to £86.96m (£71.81m).

Current cost accounts show a pre-tax surplus of £4.76m, being £498,000 higher than the historical figure.

Meeting, Great Eastern Hotel, EC, September 18, noon.

A. Russell expects increase

A FURTHER increase in turnover and profits is anticipated in the current year at Alexander Russell says Mr S. R. Nicolson, the chairman, in his annual statement.

The company will be helped by the contribution from its new coals plants and the cessation of losses in London, while blocks and quarrying are expected to maintain their position.

Pre-tax profits for the year to end March 1981 rose from £977,000 to £1.2m, on turnover up £1m to £18.12m. The company is engaged in the distribution of fuel and building supplies, quarrying, quarry management and coal recovery.

SHARE STAKES

William Baird — Prudential Corporation now holds 826,200 ordinary shares (5 per cent).

Sturla Holdings—Mr R. J. Knight (chairman) on August 13 purchased 100,000 ordinary shares; holding now 534,000.

Nottinghamshire County Council has sold 220,000 ordinary shares of Horizon and now holds 1,237,573 (5.9 per cent).

S. B. J. Z. de Ferranti, a director of Ferranti, has sold 15,000 ordinary shares (0.035 per cent) of the company. He now holds 1,286,830 ordinary shares (3.016 per cent).

Cazenove and Co. has purchased a total of 8,489,280 Ofrex ordinary shares at 190p on behalf of Gallaher Investments.

Mr Derald H. Ruttenburg, a director of the Weir Group, had an interest in 8,000,000 10 per cent redeemable cumulative part convertible preference shares of the company as at July 3 1981.

Sphere Investment Trust—The Post Office Staff Superannuation Fund has reduced its holding of ordinary shares to 1,395,000 (below 5 per cent).

BOARD MEETINGS

The following companies have notified dates of board meetings to the Stock Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are not available as to whether dividends are interims or finals and the subdivisions shown below are based mainly on last year's timetable.

TODAY

Interims:- Blagden and Noakes. Macdonald Martin Distillers, W. N. Sharpe.

Final: Jos Holdings.

FUTURE DATES

Interims—	
Allen Harvey and Ross	Sept 11
Dorada	*Sept 8*
Harmony Gold Mining	Sept 10
Montfort (Knitting Mills)	Sept 9
Nu-Swift Industries	Sept 2
Willis Faber	Sept 15
Finals—	
Bracken Mines	Sept 11
Brown Brothers	Aug 28
Kinross Gold Mines	Sept 11
Leslie Gold Mines	Sept 11
St. Helena Gold Mines	Sept 11
Unisel Gold Mines	Sept 11
Whitworth Electric	Sept 2
Winkelhaak Mines	Sept 11

Diamond Stylus looks to new products

In his annual review Mr David Garner, the chairman of Diamond Stylus says the board is very conscious that it is necessary to look to the manufacture of new products.

The company is now manufacturing and marketing a new polycrystalline diamond tool. Very little capital outlay was required as most of the equipment was already in the factory.

Pre-tax profits for the year to March 31, 1981 slumped to £31,820 (£180,562) on turnover up from £1.97m to £2.19m.

FT Share Information

The following securities have been added to the Share Information Service:—

Energy Sources (Northern Ireland) (Section: Oil and Gas).
Greenbushes Tin (Mines—Australian).
Hamilton Oil (Oil and Gas).
Hemokinetics (Electricals).
Stanelco (Industrials).
Star Computer (Industrials).
Vultan Minerals (Mines—Australian).

SPAIN

1981 High	1981 Low		Aug 21 Price %
369	251	Banco Bilbao	369
391	230	Banco Central	391
436	229	Banco Exterior	432
338	239	Banco Hispano	338
128	120	Banco Ind. Cat.	121
410	284	Banco Santander	410
236	148	Banco Urquijo	226
389	263	Banco Vizcaya	389
252	204	Banco Zaragoza	250
220	82	Dragados	218
81	45	Espanola Zinc	81
72.5	55.5	Fecsa	72
58	22	Gal. Preciados	58
84.5	63.5	Hidrola	84.5
62.5	52	Iberduero	59.5
129.7	70	Petroleos	128
85	70	Petroliber	85
102	54	Sogefisa	54
85	60	Telefonica	85
79.7	60	Union Elect.	79.7

APPOINTMENTS

New chief for Mobil Shipping

Mr Peter Biles has been appointed managing director of MOBIL SHIPPING COMPANY. He succeeds Mr Murray Robinson who is retiring.

★

Mr Michael E. Brown has been appointed company secretary and financial controller of FLENDER (U.K.), Yorkshire-based mechanical power transmission specialists. He was previously financial director and company secretary of Jack L. Barnett.

★

Mr Charles H. Moore, has joined the board of CHIYODA FIRE AND MARINE INSURANCE COMPANY (U.K.) as a non-executive director in addition to his existing market activities. Until his retirement Mr Moore was a director and deputy chief general manager of the Norwich Union Insurance Group.

★

Mr Ian Lindsay, has been appointed self-drive manager by FERRYMASTERS, at Dover.

★

Mr Trevor Allen has been elected deputy vice-president of the NATIONAL TYRE DISTRIBUTORS ASSOCIATION. He is managing director of Ebley Tyre Services, Stroud. Mr Allen is currently the NTDA south western regional representative on the executive council and vice-chairman of the career training committee. He previously served on the executive council in 1975 and 1976 when he was with Firestone's Tyre and Auto Service.

★

GULTON EUROPE has appointed Mr Peter de la Nougerede as director of engineering based at the Brighton plant. He comes from Computer Instrumentation where he was technical manager.

★

OVERSEAS

Mr Alex Crossan has been elected an executive vice-president of OCCIDENTAL PETROLEUM CORPORATION. Mr Crossan is expected to serve as president and chief executive officer of the European-based chemical operations of Enoxy when it begins operations later this year. Enoxy is the new venture being developed by Occidental and Ente Nazionale Idrocarburi, the Italian National Energy Agency. Before joining Occidental, Mr Crossan was a vice president of Dow Chemical Europe and president and chief executive officer of Dow Italy.

★

Mr Jean-Pierre Cuoni has been appointed a senior vice-president of CITIBANK, New York. Mr Cuoni, who is based in Switzerland, heads the bank's investment management group for Europe, the Middle East and Africa.

★

Mr Philip A. Carraro has succeeded Mr Paul M. Skret as general manager of CONTINENTAL ILLINOIS BANK (SWITZERLAND), of Zurich. Mr Skret returns to Continental Illinois headquarters in Chicago.

★

Mr Andre R. Naville has been appointed new resident representative of BANKERS TRUST COMPANY in Zurich.

★

The ROYAL BANK OF CANADA has appointed Mr Roger K. K. Heng as resident representative in the recently opened office in Beijing People's Republic of China.

Mr John H. B. Allan, group financial director and co-ordinator, European and African operations of Mardon Packaging International, has additionally been appointed president directeur general of IMPRIMERIES DEBAR in France. Mr Jacques Vallette has become directeur general in succession to Mr Jean Francois Vignaud who is leaving the company.

★

Mr R. T. Mackesy is resigning as an assistant director of Lazard Brothers and Co., from August 31, to become executive general manager of the AALL TRUST & BANKING CORPORATION, Grand Cayman, B.W.I., with whom Lazards have an agency management agreement.

★

Mr Robin McKenzie Smith, who owns a multimanagement business based in Vevey, Switzerland, has been appointed executive director of the newly-formed EUROPEAN AUDIO VIDEO ASSOCIATION. The main objective of EAVA—whose members represent tape and equipment manufacturers, duplication and facility houses, producers and publishers—is to join forces to deal with the varied problems confronting the whole audio video business. EAVA is open to all qualifying companies with a European operation base. Amongst the top priorities is the fight against piracy, counterfeiting and illicit distribution.

★

Mr Dominic A. Carlucci has been promoted from assistant vice president to vice president of the FIRST NATIONAL BANK in St. Louis.

★

Mr Charles A. Stewart, Jr., has been appointed vice president and treasurer of the finance department of BUTTERWORTH SYSTEMS INC, New Jersey, which manufactures equipment for tank cleaning, underwater hull cleaning, oil/water separation and high-pressure water jetting. Prior to joining Butterworth Systems, Mr Stewart completed a special assignment on loan from Exxon Corporation to the office of the Mayor of New York.

★

Following the acquisition of FRED KOCH BREWERY, Dunkirk, New York State, by Vaux Breweries, Mr J. Stuart Wilson has been appointed president and brewmaster. He was formerly the brewing director of Lorimer's Brewery, Edinburgh.

LOCAL AUTHORITY BOND TABLE

Authority (telephone number in parentheses)	Annual gross interest	Interest payable	Minimum sum	Life of bond
	%		£	Year
Knowsley (051-548 6555)	12½	1-year	1,000	1-3

WEEK'S FINANCIAL DIARY

The following is a record of the principal business and financial engagements during the week. The board meetings are mainly for the purpose of considering dividends and official indications are not always available whether dividends concerned are interims or finals. The sub-divisions shown below are based mainly on last year's timetable.

TODAY

COMPANY MEETINGS—
Booth (John) (Bolton), Penbroke Halls, High St., Worsley Manchester, 12.00
Highgate and Job, 51, Moss Street, Paisley, 12.30

BOARD MEETINGS—
Final:
Jos Holdings
Interims:
Blagden and Noakes
Macdonald Martin Distillers
Sharpe (W. N.)

DIVIDEND & INTEREST PAYMENTS—
Associated Fisheries 0.25p
Berec Group Ln. 3pc
Booth (John) (Bolton) Ord. Units 1p
Drayton Far Eastern Tst. 0.4p
Kensington and Chelsea Variable Rate Red. 1983 £6.6875
Mid-Sussex Water 8pcRed.Pf. 1986 3.768pc
Midland Bank Fltg. Rate Cap. Notes 1983 8[illegible]pc
Powell Duffryn 9.55p
Royal Bank of Canada 45cts
Trade Development Financial Services NV Gtd. Fltg. Rate Notes due 1986 8[illegible]pc
Watson and Philip 1p

TOMORROW

COMPANY MEETINGS—
London and Midland Industrials, The Portman Hotel, Portman Square, W, 12.00
Swan (John), New Mart Road Georgie, Edinburgh, 4.00
Whewway Watson 101, Sutton New Road, Erdington, Birmingham, 10.30

BOARD MEETINGS—
Finals:
Crouch Grp.
Douglas (Robert M.)
ML Hldgs.
Restmor
Interims:
American Tst.
Anglo American Industrial
Charterhouse Petroleum
Fairclough Construction
Fife Forge
Hongkong and Shanghai Banking
Philips' Lamps
Queens Moat Houses

DIVIDEND & INTEREST PAYMENTS—
Baker Intnl. Corp. 15cts
Bischl Tin 0.65p
Chamberlain Phipps 2p
Eaton Corp. 43cts
Exchequer 11¼pc 1986 5⅝pc, 12¼pc 1992 6⅛pc
Swan (John) 7.425p

WEDNESDAY, AUGUST 26

COMPANY MEETINGS—
Harris (Philip), Penns Hall Hotel, Walmley, Sutton Coldfield, 12.00
Wiggins Construct, The Royal Automobile Club, Pall Mall, SW, 12.00

BOARD MEETINGS—
Finals:
Associated Dairies
Hanover Invs.
Moran Tea
Victor Products (Wallsend)
Interims:
Blue Circle Inds.
Comben
Pearl Assurance
Robinson (Thomas)
Slough Estates
Stanley (A. G.)

DIVIDEND & INTEREST PAYMENTS—
Bank of Ireland Fltg. Rate Cap. Notes 1989 US$50.15
Batleys of Yorkshire 1.7p
French (Thomas) 2.25p
Great Northern Telegraph Company's Holdg. Co. Dk 5.4. Do. (Br. Dk 90) Dk 9
MBI Intnl. NV Gtd. Fltg. Rate Notes 1986 US$51.58
Mercury Common Market Tst. Ptg. Pf. 56p
Toothill (R. W.) 3.5p

THURSDAY, AUGUST 27

COMPANY MEETINGS—
Bassett (George), Livesey Street, Owlerton, Sheffield, 3.30
Benlox, Winchester House, Old Broad Street, EC, 2.30
Initial Services, The Chartered Accountants' Hall, Moorgate Place, EC, 12.15
Investment Co., St. Martin's House, 16, St. Martin's le grand, EC, 12.00
Monk (A.), Green Lane Padgate, Warrington, 3.00
Phillips Patents, Grand Hotel, Aytoun St., Manchester, 12.00
Redland, Plaisterers Hall, London Wall, EC, 12.15
Spong, Repton Close, Basildon, 11.30
Vinten, The Athenaeum, Angel Hill Bury St. Edmunds, 12.00
Whittington Engineering, South St. North, New Whittington Chesterfield, 12.00

BOARD MEETINGS—
Finals:
Barget
Mining Supplies
Sime Darby
Somportex
Interims:
BBA
Hill and Smith
Lambeth Howarth
Lec Refrigeration
Mlyconcrete
Refuge Assurance
Scottish Agricultural Industries

DIVIDEND & INTEREST PAYMENTS—
Alexanders Discount 5.5p
Associated Newspapers 4.5p
Bassett (Geo.) 1.5p
Cawoods 2.5p
Dawson Intnl. 5.25p
Harris (Philip) 4.75p
Scottish and Newcastle Breweries 2.875p

FRIDAY, AUGUST 28

COMPANY MEETINGS—
Davenport Knitwear, Allen House, Newarke Street, Leicester, 11.30
Lennons Group, Abbotts Well Hotel, Chester, 12.00
Sogomana Group, St. Vincent Street Glasgow, 12.00

BOARD MEETINGS—
Finals:
Brown Brothers
Linfood
Raybeck
Second Alliance Tst.
Waring and Gillow
Interims:
Alliance Tst.
Scottish Northern Inv. Tst.
Wagon Finance

DIVIDEND & INTEREST PAYMENTS—
Agricultural Mortgage 4½pcDb. 1977-82 2¼pc
Allied Leather Inds. 6pcPf. 1.75pc
Allnatt London Properties Db. 5¼pc
Anglo-Indonesian Corp. 3.3275p
Arlington Motor 2.5p
Bank of Montreal 46cts
Bankers Inv. Tst. 1.98p
Benlox 0.5p
Bergen Bank A.S. Fltg. Rate Cap. Notes 1989 US$48.50
Chubb 3.4784p
Citicorp Gtd. Fltg. Rate Notes 1983 US$477.12. Gtd. Fltg. Rate Notes 1984 US$475.51
City of London Brewery and Inv. Tst. Dfd. Ord. Units 1.1p. 8pc1stPf. 2.1pc. 6pc2ndPf. 2.1pc. Pf.Ord.Units 7pc
Cohen (A.) Ord. and A Ord. 4.9p
Colonial Securities Tst. 0.8p
Cronite Grp. 5.6pPf. 2.8pc
Danae Inv. Tst. Income Shares 2.4p
Dunbar Grp. (USM) 3.75p
GTE Finance NV Fltg. Rate Notes 1987 US$43604
Hawley Leisure 1p
Hepworth (J.) Dbs. 2¾ 3½ 3¾pc
Hickson and Welch 2.5p
Kwik-Fit (Tyres and Exhausts) Ln. 4pc
Liverpool 13pc 1985 6½pc
Lloyds Bank 8.625p
London and St. Lawrence Inv. 5pcPf. 1.75pc
London and Scottish Marine Oil Ln. 7pc
Manufacturers Overseas Capital Corp. Gtd. Fltg. Rate Notes 1994 US$48.19
Mid-Sussex Water 7pcRed.Pf. 1983 3.5pc
National Westminster Bank 9.825p
Northern Foods 1.8p
Panama (Republic of) Fltg. Rate Ser. Notes due 1990 US$903.68
Romney Tst. Ord. Units 1.3p
Security Services 4½pcPf. 1.575pc
Sotheby Parke Bernet Grp. 3.5p. 9½pcPf. 4.75pc
United British Securities 4p
Vectis Stone 0.6p
Whittingham Engineering 2.1p
Williams and Glyn's Cap. Notes 1984 US$36.58

SATURDAY, AUGUST 29

DIVIDEND & INTEREST PAYMENTS—
Murray Western Inv. Tst. 0.6p

M. J. H. Nightingale & Co. Limited

27/28 Lovat Lane London EC3R 8EB Telephone 01-621 1212

£000's capitalisation	Company	Price	Change on week	Gross div. (p)	Yield %	P/E Actual	P/E Fully taxed
1,124	ABI Hldgs. 10pc CULS	113	+1	10.0	8.8	—	—
4,062	Airsprung	70	+1	4.7	6.7	11.1	15.4
1,075	Armitage and Rhodes	43	+2	4.3	10.0	3.8	8.1
12,098	Bardon Hill	198	—	9.7	4.9	8.6	11.7
7,824	Deborah Services	103	—	5.5	5.3	5.1	9.7
3,974	Frank Horsell	108	+2	6.4	6.0	9.5	23.0
9,246	Frederick Parker	64	+1	1.7	2.7	27.8	—
1,181	George Blair	84	—	3.7	4.8	—	—
4,020	IPC	99	—	7.3	7.4	7.1	10.3
2,707	Jackson Group	107	−1	7.0	6.5	3.4	7.6
17,114	James Burrough	124	−3	8.7	7.0	9.1	11.4
3,142	Robert Jenkins	308	−2	31.3	10.2	4.3	10.9
2,940	Scruttons	59	—	5.3	9.0	9.1	8.4
2,908	Torday	189	−1	15.1	8.0	7.3	12.5
2,776	Twinlock Ord.	13	—	—	—	—	—
2,075	Twinlock 15pc ULS	76	—	15.0	19.7	—	—
5,546	Unilock Holdings	37	—	3.0	8.1	6.6	11.2
11,767	Walter Alexander	93	−1	6.4	6.9	8.1	10.8
5,484	W. S. Yeates	236	−1	13.1	5.8	4.5	9.0

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INTERNATIONAL CAPITAL MARKETS

INTERNATIONAL BONDS

BY FRANCIS GHILES

Attention focused on convertibles

IN THE ABSENCE of any clear indication of when, or even whether, U.S. interest rates will start moving down, attention in the international bond market was firmly focused on convertibles, more particularly issues for Japanese borrowers.

Many investors are convinced that the Yen will rise sharply once U.S. interest rates decline substantially, and continue to be impressed by what they perceive to be the bright outlook for the Japanese economy.

However, whereas last year many Japanese stores floated convertible bonds, interest this time round centres on companies in the electronics and more specialised sectors. All recent Japanese issues have been well received—some so well as to allow a cut in their indicated coupon. This is what happened last week with the $30m issue to 1996 for Daiwa Securities, whose final coupon of 5½ per cent was ¼ per cent lower than initially indicated.

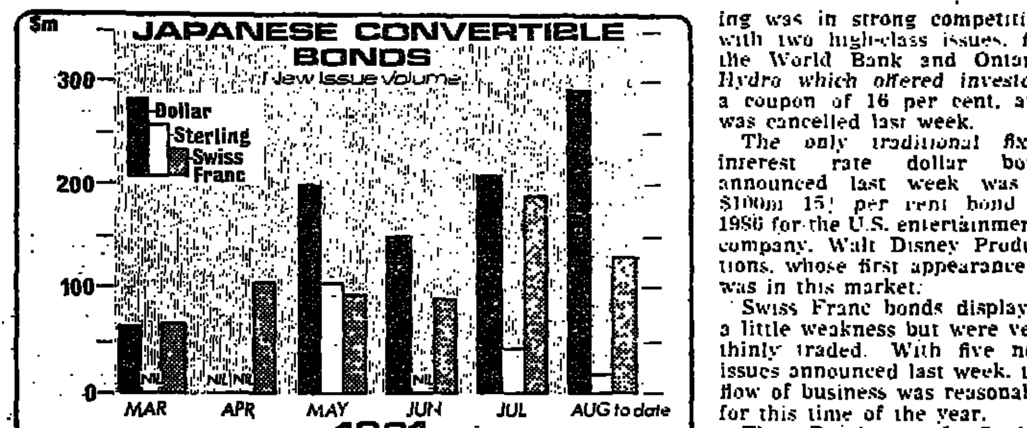
All the convertibles floated last week were for Japanese borrowers, including a rare one in the Eurosterling sector. Nifco was tempted into borrowing in this sector because of the relatively low front-end costs, which assume considerable importance in such a small issue. The bonds were placed exclusively with British institutions and Nifco is hoping that the issue will enlarge the float of its shares on the Tokyo stock exchange.

Many Japanese companies have witnessed a decline in the marketability of their shares, as purchases by long term portfolios, notably in the Middle East, have been stepped up in the past twelve months.

A further $100m 15 year convertible, for Sanyo Electric, is expected later this week, through Yamaichi.

Trading in fixed interest dollar bonds was quiet throughout last week with most attention focused on two new issues. Hiram Walker Home became the fifth borrower this year to issue bonds with warrants. This 15¾ per cent bond to 1984 met with a warmer reception than some other recent issues, and was increased by $15m to $65m.

Not all new issue managers and traders are convinced that bonds with warrants will continue to be popular. They are worried about the lack of liquidity which appears to bedevil the trading of the warrants after the initial flurry which follows the appearance of most new issues.



GTE Finance, meanwhile, has failed in its attempt to raise $50m even after sweetening the terms on a seven-year straight issue which was offered to holders of warrants attached to an earlier issue.

In January, the company launched a $50m bond to 1986 which carried a coupon of $13¾ per cent—a competitive rate at that time—and warrants to buy into a seven-year issue with the same coupon.

The warrants expired on August 15. A week before that date, the company, through the lead manager of its January issue, Blyth Eastman Paine Webber, decided to increase the coupon on the new issue to 16¼ per cent, but indicated that if less than $20m was subscribed for, none of the new bonds would be issued. The new offering was in strong competition with two high-class issues, for the World Bank and Ontario Hydro which offered investors a coupon of 16 per cent, and was cancelled last week.

The only traditional fixed interest rate dollar bond announced last week was a $100m 15¾ per cent bond to 1986 for the U.S. entertainments company, Walt Disney Productions, whose first appearance it was in this market.

Swiss Franc bonds displayed a little weakness but were very thinly traded. With five new issues announced last week, the flow of business was reasonable for this time of the year.

The Province of Quebec launched a DM 150m bond to 1991 which carries an indicated coupon of 10¾ per cent through Commerzbank. The signs pointed to a lukewarm reception for this borrower, whose name which is not to all investors' liking.

An SDR floating rate note for Ferrovie dello Stato is being arranged through Dillon Read and Orion Royal Bank while Hydro Quebec is carefully studying the possibility of arranging a bond denominated in European Units of Account.

CURRENT INTERNATIONAL BOND ISSUES

Borrowers	Amount m.	Maturity	Av. life years	Coupon %	Price	Lead manager	Offer yield %
U.S. DOLLARS							
‡§Yamanouchi Pharmaceutical	40	1996	15	5¼	100	Goldman Sachs, Nikko Secs. (Europe)	5.750
‡§Daiwa Securities	50	1996	15	5½	100	CSFB	5.500
‡World Bank	210	1986	4.6	16	100	Salomon Bros. Deutsche	16.000
‡World Bank	80	1988	5.2	16	100	Salomon Bros. Deutsche	16.000
‡Cont. Illinois O/S	100	1984	3	14½	99¾	Cont. Illinois	14.860
§Aida Engineering	20	1996	15	5½	100	Yamaichi Secs.	5.500
†C.C.C.E. (g'teed France)	100	1993	12	—	100	CCF, Caisse des Depots	—
†Industrias Resistol SA	30	1988	7	9°	100	Merrill Lynch Cont. Illinois	9.203°
§Nippon Chemi-Con Corp.	20	1991	10	5½	100	Nikko Secs. (Europe)	5.500
†Hiram Walker Hldgs. NV	65	1984	3	15¾	100	Morgan Guaranty, S.G. Warburg	15.750
‡Walt Disney Prods. Intnl. Fin. NV	100	1986	5	15¾	99½	Morgan Stanley	15.902
§JACCS Co.	25	1996	15	5½	100	Yamaichi Secs.	5.500
D-MARKS							
Province of Quebec	150	1991	10	10¾	*	Commerzbank	*
SWISS FRANCS							
‡Philip Morris Intl. Cap. NV	100	1991	—	6¾	100	SBC	6.750
Gillette O/S Fin. Corp NV	100	1991	—	6¾	*	Credit Suisse	*
‡**New Zealand	200	1986	—	7½	100	UBS	7.500
‡**§Nichii Co.	100	1986	—	5½	100	UBS	5.500
‡**§Araya Indl. Co.	20	1986	—	5½	100	Credit Suisse	5.500
STERLING							
‡§Nifco	12	1996	15	6	100	Baring Bros.	6.000
SDRs							
†Ferrovie dello Stato	100	1985	4	5°	100	Dillon Read, Orion Royal Bank	5.062°
KUWAITI DINARS							
‡City of Stockholm	7	1991	10	10	94¾	KIC, PKbanken	10.887

CREDITS

BY FRANCIS GHILES

Pemex appetite confuses the market

MEXICO's state oil company, Pemex, is currently trying to tie up over $1bn worth of loans in the international and UK capital markets in the form of three different facilities and there are rumours of approaches being made by the same borrower with a view to raising a further $100m-$200m.

This borrower's voracious appetite for funds has been increased of late by the fall in the price Mexico is receiving for its crude oil. But the number and size of the deals which are being arranged at present has somewhat "muddied the waters," in the words of one banker involved.

European Banking Company which is arranging a $500m loan-bond hybrid for Pemex is having greater difficulty than anticipated in putting together a management group of banks willing to underwrite $25m or $50m apiece.

By Friday evening, EBC had received commitments to underwrite about half the total amount. Banks were slow to answer because they were being approached by the other two bank syndicates putting loans together for Pemex.

The second operation for Pemex is a £200m domestic sterling acceptance credit being put together under the aegis of Samuel Montagu, Baring Brothers and N. M. Rothschild with the latter two acting as agents. The facility matures in two years and can be renewed at the borrower's option for two further periods of two years each.

This is the largest such facility for a foreign borrower to be arranged in London, and the second largest ever after the $240m arranged for Midland Montagu Leasing. The accepting commission is ½ per cent, and the agent banks will receive a further fee from the borrower.

Bank of Nova Scotia meanwhile is trying to put together a management group of banks for a $200m six years loan for Pemex which is expected to carry a margin of ½ per cent over Libor.

Venezuela for its part is putting more order into its borrowing programme following the adoption of a law by Congress in Caracas allowing the state to borrow medium term. The draft law has been sent back to Congress for minor changes by President Campins and this has allowed Rosenthal International, which is arranging one of the last one-year deals for a Venezuelan public sector borrower, to increase the loan it is arranging for CVF to $180m. CVF is paying a split spread over Libor of ⅝-¾ per cent.

The first mandate for a medium term loan for a Venezuelan state entity is expected to be awarded by Electrificacion del Caroni to Bank of America, Bank of Tokyo, and Chase Manhattan. The amount will be $186m for ten years with a margin of ⅝ per cent throughout. Such terms may not, however, provide a useful guide to the terms Venezuela may have to pay when it comes to the market this autumn for its expected "jumbo" loan. A number of banks would baulk at such a long maturity for a large sum.

Meanwhile the director of public credit at the Ministry of Finance in Caracas is expected to hold a meeting with the representatives of 90 or so foreign banks later in September to outline the implications of the new law and the effects it will have on the country's borrowing plans.

Elsewhere in Latin America, the response to the $500m loan to 1988 for the Republic of Argentina is said to be very satisfactory. This is being put together under the aegis of a powerful group of international banks for which Bank of America and Lloyds Bank International are acting as agents.

In Brazil, the mandate for a $150m eight year loan for Electronorte is expected to go to Bank of America and National Bank of Canada. Terms are likely to include a split margin of 2-2¼ per cent over U.S. or Canadian prime rates, very much in line with the terms the market has come to expect from Brazilian borrowers in recent months.

Poland for its part has given a qualified approval to the proposals put forward by Western banks four weeks ago for rescheduling about $2.4bn of commercial debt which falls due in the last three quarters of 1981. Poland has agreed to the proposed margin over Libor of 1¾ per cent but would like to lengthen a little the maturity of the proposed loan beyond seven years. It is not happy either with the proposed front-end fee of 1 per cent.

While there is agreement between the bankers and the borrower on the economic data Poland will provide, there is as yet no agreement about the manner in which the banks will monitor the country's economic progress.

U.S. BONDS

BY DAVID LASCELLES

Mixed blessing from Fed

THE FEDERAL Reserve Board is sticking to its view that any let-up in monetary restraint would be premature and would jeopardise the battle against inflation. This is the message that came out of its policy making open market committee meeting last week. Mr. Paul Volcker, the chairman, also said in a TV interview that the Fed would not be deflected by "every shift in the business breeze."

Rebutting critics who claimed the Fed is destroying whole segments of U.S. industry with its high interest rate regime, Mr Volcker argued as he has many times before, that the impact is localised and that weak industries have the resilience to rebound once interest rates come down again.

The Fed's "no change" decision was a mixed blessing for the credit market. Some people had hoped for an easing given that the money supply continues to grow at manageable rates, and they were disappointed. On balance, the market weakened and there was a sharp dip late on Friday when the money supply figure showed a moderate rise in M1-B of $800m. But others drew encouragement because it shows the central bank still means business.

In the longer term, the major event of the event may well turn out to be the Administration's confession that its budget plans for 1982-84 are unrealistic. President Reagan met his advisors in his California holiday retreat to hack another $20bn out of next year's budget to bring the deficit down from this year's $60bn to $40bn. It also became clear that the Administration doubts that it will be able to balance the budget by 1984, once its key goal.

To Wall Street, all this suggests there will be no let-up in the Treasury's borrowing requirement for at least a year. The more time goes by, the more Mr Reagan's predicament looks like Mrs Thatcher's: rapidly instituted tax cuts cannot be matched by spending cuts and the resulting budget gap puts a heavy strain on the open market.

It was certainly no coincidence that both the stock market and the credit markets hit new lows last week. The Treasury learnt this to its cost when it sold 4.75bn of two-year notes at a record yield of 16.26 per cent, up from 15.92 per cent at the last auction on July 22.

The Fed's announcement of a special credit facility to help out thrift institutions suffering a financial squeeze was also bad news.

The poor state of the market has left borrowing at a virtual standstill. According to Salomon Brothers the corporate new issue bond calendar for August totals about $8.50m, the smallest monthly volume for almost eight years.

U.S. INTEREST RATES (%)

	Week to Aug 21	Week to Aug 14
Fed Funds wkly avge	18.57	17.90
3-month Treas. bills	15.44	15.50
3-month CD	18.10	18.02
30-year Treas. bond	14.05	13.82
AAA utility	16.50	16.50
AA industrial	15.50	15.63
Visible supply Corp. bonds	7.2	7.1

Source: Salomon Bros. and First Boston.

FT INTERNATIONAL BOND SERVICE

U.S. DOLLAR STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Amoco 13¼ 88	75	88⅝	89⅛	−0¼	−1⅛	16.10
CIBC 14½ 84	185	95⅛	95⅞	−0⅛	−0⅜	16.57
CIBC 15¼ 86	75	97¼	97¾	0	−0⅝	15.98
CNA 15¼ 96	75	92¼	92¾	−0⅛	−1¼	16.61
CNE 12¾ 91	100	81⅞	82⅜	−0⅛	−0⅜	16.57
Citicorp Int Fin. 15 86	150	96½	97	0	−0⅛	15.98
Citicorp O/S 15½ 84	175	98⅛	98⅞	−0⅛	−0⅛	16.06
Dupont Canada 13½ 91	65	88½	89	−0⅛	−0⅛	15.82
EEC 14⅛ 93	85	91½	92	−0⅛	−1½	16.33
EIB 12⅞ 89	75	84⅞	85⅜	0	−1	16.24
Eldorado 13¼ 86	50	90¼	90¾	−0⅛	−0⅞	16.28
Elec. de France 13 88	125	86⅝	87⅛	+0⅛	−1⅛	16.40
Fed. Bs. D. 12¾ 85 (N)	50	87½	88	+0⅛	−0⅛	16.43
Fed. Bs. D 15⅞ 84 (J)	40	98⅝	99⅛	0	−0⅛	16.20
Fin. Exp. Credit 10⅝ 85	50	82½	83	−0⅛	−1	16.90
Finland, Rep. of 9½ 86	100	77⅜	77⅞	0	−1	16.85
Ford Cr O/S Fin. 16 84	150	99⅝	100⅛	+0⅛	−0⅛	15.85
Ford Cr. O/S Fin. 16 85	150	97⅜	97⅞	+0¼	+0⅛	16.83
Gaz de France 13½ 88	80	90⅜	90⅞	−0⅛	−0½	16.58
GMAC O/S Fin. 12⅞ 88	100	87½	88	−0⅛	−0⅛	16.00
GMAC O/S Fin. 14¾ 87	100	93⅜	93⅞	−0⅛	−0⅛	16.49
Gen. Mts. O/S 11¾ 87	100	84¼	84¾	−0⅛	−0⅝	15.85
Genstar 14⅝ 91	50	94⅛	94⅝	−0⅛	−1½	15.88
Hiram Walker 16 88	50	101⅛	101⅝	−0⅛	−0⅞	15.47
IBM Wld. Trade 12½ 88	200	91½	92	−0⅛	−0½	14.50
IBM Wld. Trade 14⅝ 84	100	100½	101	−0⅛	−0⅛	14.34
IBM Wld. Trade 14⅝ 85	60	99⅝	100⅛	−0⅛	−0½	14.77
Nat. Bk. Canada 15¼ 84	40	97¼	97¾	+0⅛	+0⅛	16.35
Newfoundland 13½ 90	60	86⅞	87⅜	−0⅛	−0½	16.36
Nova Scotia 15 91	75	93½	94	+0⅛	−0⅛	16.29
Ontario Hydro 13½ 91	100	87⅝	88⅛	−0⅛	−2⅝	16.02
Pacific Gas Elec. 16 88	75	101⅛	101⅝	+0⅛	+0⅞	15.62
PSNH Int. Fin. 17 86	30	97¾	98¼	+0⅛	+0⅛	17.63
Queb. Hy. 13 91 (WW)	100	83⅛	83⅝	−0⅛	−1	16.54
Royal Bk. Canada 14 86	100	93½	94	−0¼	−1	15.92
SNCF 13 91	75	86	86½	−0⅛	−1⅛	15.85
Sth. California 14 87	50	94⅝	95⅛	0	−0⅛	15.36
Sth California 14⅝ 88	50	95⅛	95⅝	−0⅛	−0⅛	15.87
Sven Handlsbk 13⅝ 88	45	†89	89½	−1½	−1⅛	16.47
Swed. Ex Credit 13 86	75	87¾	88¼	+0⅛	−0⅛	17.01
Swed. Ex. Cred. 15¼ 88	50	96⅝	97⅛	+0⅛	−1⅛	16.68
Toronto-Dom. Bk. 14 84	50	94	94½	0	−0⅛	16.74
Tribune O/S Fin. 14 86	50	92⅜	92⅞	0	−0⅛	16.34
Wells Fargo Int. 15½ 84	50	98⅜	98⅞	−0⅛	−0⅛	16.06
World Bank 10¾ 87	300	78⅛	78⅝	−0⅛	−0⅛	16.24
World Bank 14⅛ 86	500	93¼	93¾	−0⅛	−0⅛	16.38

Average price changes... On day −0⅛ on week −0⅝

DEUTSCHE MARK STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Asian Dev. Bank 10 91	100	95¼	96	−0⅛	−1⅛	10.73
Austria, Rep. of 8¼ 92	150	86⅛	86⅞	+0⅛	0	10.34
CECA 7⅞ 92	150	84⅝	85⅛	−0⅛	−0⅛	10.20
CECA 10 91	120	97½	98¼	−0⅛	−1½	10.34
Cii-Honeywell 8½ 90	125	85⅛	86⅛	−0⅛	−1⅛	10.90
Council of Europe 10 91	100	97½	98¼	−0⅛	−0⅛	10.34
EIB 8½ 90	200	87⅞	88⅜	+0⅛	−1⅛	10.65
EIB 10½ 91	200	98	98¾	−0¼	−1¼	10.76
ESCOM 9¾ 87	100	89⅞	90⅞	−0⅛	−0⅛	11.49
Finland, Rep of 10 88	100	96¼	97	+0⅛	−0⅛	10.64
Iberduero SA 9 90	100	90¾	91½	−0¼	−0⅛	10.58
Ind. Bk. Finland 8½ 90	50	88	88¾	+0⅛	−0¼	10.52
Int.-Am. Dv. Bk. 10 91	100	95¼	96	−0¼	−1⅝	10.73
Japan Air Lines 8½ 87	100	88⅛	89⅛	+0⅛	−1½	10.55
Japan Dev. Bk. 7⅝ 87	100	87¼	88	+0⅛	−0⅛	10.50
Kobe, City of 8 90	100	86⅛	86⅞	−0⅛	−1½	10.40
Midland Int. Fin. 8½ 90	180	88½	89¼	−0⅛	−1	10.44
Nuclebras 9¾ 88	100	86⅞	86⅜	0	−0½	12.81
OKB 8¾ 92	150	84½	85¼	−0½	−1⅝	10.66
Oslo, City of 8½ 90	80	89⅝	90⅛	−1⅛	−2½	10.59
Renault Acc 10⅛ 86	150	96¾	97½	0	+0⅛	11.54
Venezuela, R. of 9¾ 90	150	92⅝	93⅜	−0⅛	−0⅛	10.84
World Bank 8 90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Average price changes... On day [illegible] on week [illegible]

SWISS FRANC STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Aerospat. Paris 6¾ 91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BFCE 6½ 91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Bayer Int. Fin. 5¾ 92	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Belgelectric Fin. 7¾ 91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Bergen, City of 6¾ 91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CECA 6½ 91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Denmark 5¾ 90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Dome Petroleum 5¾ 91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Dome Petroleum 7¾ 90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Elec. de France 5¾ 91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Eurofima 5¾ 92	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Finland, Rep. of 5¾ 91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Franc. Petroles 6½ 91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Genstar 7 91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Int.-Amer. Dev. Bk. 7 85	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Japan Dev. Bank 5¾ 90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mt. Blanc Tunnel 5½ 90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Neweg 5½ 90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
OKB 7 92	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Osaka, City of 5¾ 90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Philips Lamps 5¾ 92	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Swed. Ex. Credit 7¾ 91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Trade Dev. Fin. 5¾ 90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Voest-Alpine 5¾ 91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
World Bank 5 91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
World Bank 7 90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Average price changes... On day [illegible] on week [illegible]

YEN STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Asian Dev. Bk. 8½ 91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Australia 8½ 91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
EIB 8½ 91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Finland 6.8 86	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Finland, Rep. of 8½ 87	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New Zealand 8½ 87	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Average price changes... On day 0 on week −0⅛

OTHER STRAIGHTS	Issued	Bid	Offer	Change on day	Change on week	Yield
Bell Canada 10¾ 86 CS	60	†82½	83½	−0¼	0	15.82
CIBC 13½ 85 CS	50	†91½	92½	−0½	0	16.46
CIBC 11½ 85 CS	60	†84	85	0	+0½	17.25
Federal Dev. 11½ 90 CS	60	†75½	76½	0	+0½	16.88
Fst. Can. Inv. 10 84 CS	50	†83	84	0	+0½	18.09
R. Bk. Canada 10 86 CS	40	†85	87	0	0	14.22
Tordom. Cpn. 13½ 85 CS	30	†91	92	−0½	−1	16.66
M. Bk. Dnmk. 9 91 EUA	25	85⅞	87⅛	0	−0⅛	11.27
SOFTE 8¾ 89 EUA	40	82⅛	83⅛	0	−2	11.78
U. Bk. Nwy. 9½ 90 EUA	18	90¼	91¼	0	−0½	11.12
Algemene Bk. 10¾ 86 Fl	60	93	93½	0	−0⅛	12.23
Amro Bank 12 86 Fl	75	98⅞	99⅜	−0⅛	−0½	12.23
Heineken NV 10 87 Fl	100	91⅜	92⅛	−0⅛	−1	11.99
Nat. Nedrlndn. 10 88 Fl	60	93¾	94¼	+0⅛	−0⅛	11.33
Ned. Midd. Bk. 10 85 Fl	75	94¼	94¾	+0½	+0¼	11.77
Pierson 10¾ 86 Fl	50	92	92½	0	−0⅛	12.55
Rabobank 12 86 Fl	50	98¼	98¾	−0⅛	−1	12.40
Air France 14½ 86 FFr	200	91⅝	92⅝	0	−0⅛	17.00
Bk. America 14½ 86 FFr	250	89¼	90¼	−0⅛	−0⅛	17.82
Charb'nages 13⅞ 85 FFr	400	88½	89½	0	−0½	17.64
EIB 14⅛ 88 FFr	300	86½	87½	−0¼	−0⅛	17.60
Le Redoute 14⅞ 85 FFr	125	86½	87½	0	+0⅛	18.93
OKB 14 86 FFr	400	88¼	89¼	0	−1⅛	17.75
Solvay et C. 14⅞ 86 FFr	200	92⅜	93⅜	0	−2⅛	17.03
Swed. E. Cr 14⅝ 86 FFr	250	86⅞	87⅞	−0⅛	0	19.04
U. Mex Sts. 14 85 FFr	150	88¼	89¼	−0⅛	+0¼	18.30
Acona 14 85 £	20	93	94	0	+0⅛	16.15
Beneficial 14¾ 90 £	20	83⅜	84½	+0½	+0⅛	17.90
BNP 13½ 91 £	15	85⅝	86⅛	0	+0¼	16.48
CECA 13½ 88 £	20	88½	89¼	0	−0⅛	16.20
Citicorp O/S 13½ 90 £	50	90½	91¼	−0½	−0⅛	15.45
Fin Ex. Cred. 13¾ 86 £	15	92¼	93	+0⅛	+0⅞	16.06
Gen. Elec. Co. 12½ 89 £	50	85⅛	85⅞	+0½	−0¼	15.87
Hiram Walker 14¾ 86 £	25	93¼	94	0	−0¼	16.23
Privatbanken 14½ 88 £	12	90⅝	91⅜	+0⅛	+0¼	16.85
J. Rothschild 14¾ 90 £	12	92⅝	93⅜	0	−0⅛	15.75
Royal Trustco 14 86 £	12	92⅞	93⅝	0	+0¼	16.13
Swed. Ex. Cr. 13¾ 86 £	20	92½	93¼	0	+0⅛	15.98
Akzo 9¾ 87 LuxFr	500	89½	90½	0	0	11.59
Euratom 9⅝ 88 LuxFr	500	86⅝	87⅝	0	0	12.92
Eurofima 10½ 87 LuxFr	500	88⅜	89⅜	0	+0⅝	13.13
EIB 9¾ 88 LuxFr	600	86⅝	87½	0	+0¼	12.84
Volvo 9⅞ 87 LuxFr	500	85⅝	86⅝	0	+0½	13.10

FLOATING RATE NOTES	Spread	Bid	Offer	C.dte	C.cpn	C.yld
Bank of Montreal 5⅞ 90	0¼	98½	98⅝	18/12	16⅝	17.03
BBL Int. 5 86	0¼	99⅝	99⅝	20/11	18.31	18.43
BNP 5½ 88	‡0½	99¼	99¾	29/10	18.81	18.91
Christiania Bk. 5½ 91	‡0¼	98½	99	5/11	19.19	19.43
Citicorp O/S Fin. 94	‡0	99½	99⅝	31/8	18⅞	18.99
C. Itoh 5¾ 87	0¼	99¼	99¾	18/9	15.44	15.52
Co-operative Bk. 6 86	0½	99½	100	15/11	19.56	19.61
Den Norske Credit 6 90	‡0½	98⅝	99⅛	5/11	19.19	19.41
Genfinance 5¾ 87	0⅛	99	99½	30/10	16.94	17.07
Genfinance 5¾ 92	0¼	99	99½	30/12	18.31	18.45
Giro und Bank 5⅞ 91	‡0¼	98⅞	99⅜	23/9	19.06	19.23
GZB 5¾ 92	‡0¼	98¼	98⅝	5/9	17⅛	17.53
Ind.-Bank Japan 5⅞ 88	0⅛	99	99½	9/10	16.44	16.56
Lloyds Eurofin 8 90 £	0¼	97¼	97⅝	6/1	13⅝	13.97
Lloyds Eurofin 5¼ 92	0¼	98¼	98⅝	4/12	17.44	17.70
LTCB Japan 5¼ 86	0⅛	99¼	99⅝	13/12	17¼	17.36
LTCB Japan 5½ 89	0¼	99¼	99⅝	16/7	18.32	18.41
Man. Hanov. O/S 5½ 94	‡0½	99½	99¾	30/8	19.06	19.16
Merrill Lynch O/S 87	‡0¼	100	100½	9/11	19.06	19.01
Midland Int. Fin. 5¾ 92	0¼	98⅞	98⅞	5/12	17⅛	17.62
Midland Int. Fin. 9 91	0¼	98½	98⅞	30/10	16.81	17.05
Nacional Fin. 5¾ 86	0⅛	98⅝	99⅛	25/1	19¼	19.44
Nacional Fin. 5½ 88	0⅛	97	97½	25/9	14⅞	15.30
Nat. Bk. Canada 5¼ 88	0¼	98¼	98⅝	24/9	14½	14.72
Nat. West 5¼ 94	§0¼	98	98½	14/10	16.19	16.48
Nat. West Fin. 5¾ 91	§0¼	98½	99	15/1	18⅛	18.35
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17.09
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.77
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18.81
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17.13
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18.24

Average price changes... On day 0 on week 0

CONVERTIBLE BONDS	Cnv. date	Cnv. price	Bid	Offer	Chg. day	Prem
Ajinomoto 5½ 96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	−3.41
Bow Valley Inv. 8 95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12.60
Canon 5¾ 95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.18
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.73
Digicon Fin 8½ 95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9.09
Fujitsu 5¾ 96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.86
Furukawa Elec. 5¾ 96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.26
Hanson O/S Fin. 9½ 96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.79
Hitachi Cred. Cpn. 5½ 95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.23
Ina Overseas 8½ 2000	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.93
Inchcape 8¾ 95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11.86
Marion Int. Fin. 9 95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	29.81
Marui 6¼ 96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.49
Matsushita El. 7½ 95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.86
Murata 5¾ 96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	−2.48
NKK 6¾ 96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	44.41
Ricoh 6¾ 95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	−0.11
Sumitomo M. Ind. 7 96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.07
Swiss Bk. Cpn. 6¾ 90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	36.95
Taylor Woodrow 8¾ 90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.34
Texaco Int. 8¾ 95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19.45
Tricorp 8½ 95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.40
Union Bk. Switz. 5 98	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10.99
Sharp Cpn. 6½ 88 DM	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	−1.71
Uny Co. 6½ 85 DM	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	−3.62

EUROBOND TURNOVER

(nominal value in $m)

	Cedel	Euro-clear
U.S. $ bonds		
Last week	2,612.6	3,297.4
Previous week	3,091.9	3,074.5
Other bonds		
Last week	591.5	286.6
Previous week	756.1	314.9

* No information available—previous day's price.

† Only one market maker supplied a price.

STRAIGHT BONDS: The yield is the yield to redemption of the mid-price; the amount issued is in millions of currency units except for Yen bonds where it is in billions. Change on week=Change over price a week earlier.

FLOATING RATE NOTES: Denominated in dollars unless otherwise indicated. Coupon shown is minimum. C.dte=Date next coupon becomes effective. Spread=Margin above six-month offered rate (‡ three-month; § above mean rate) for U.S. dollars. C.cpn = The current coupon. C.yld = The current yield.

CONVERTIBLE BONDS: Denominated in dollars unless otherwise indicated. Chg. day=Change on day. Cnv. date=First date for conversion into shares. Cnv. price=Nominal amount of bond per share expressed in currency of share at conversion rate fixed at issue. Prem=Percentage premium of the current effective price of acquiring shares via the bond over the most recent price of the shares.

The list shows the 200 latest international bonds for which an adequate secondary market exists. The prices over the past week were supplied by:

Kredietbank NV; Credit Commercial de France; Credit Lyonnais; Commerzbank AG; Deutsche Bank AG; Westdeutsche Landesbank Girozentrale; Banque Generale du Luxembourg SA; Banque Internationale Luxembourg; Kredietbank Luxembourg; Algemene Bank Nederland NV; Pierson, Heldring and Pierson; Credit Suisse/Swiss Credit Bank; Union Bank of Switzerland; Akroyd and Smithers; Bankers Trust International; Credit Commercial de France (Securities) London; Citicorp International Bank; Daiwa Europe NV; Deltec Trading Company; EBC; First Chicago; Goldman Sachs International Corporation; Hambros Bank; IBJ International; Kidder Peabody International; Manufacturers Hanover; Merrill Lynch; Morgan Stanley International; Nikko Securities Company (Europe); Orion Royal Bank; Salomon Brothers International; Samuel Montagu and Co.; Scandinavian Bank; Societe Generale Strauss Turnbull; Sumitomo Finance International; S. G. Warburg and Co.; Wood Gundy.

Closing prices on August 21

CONTRACTS AND TENDERS

PREQUALIFICATION FOR PIPELINE CONSTRUCTION CONTRACTORS

Under the coverage of Bati Raman enhanced oil recovery project, Turkish Petroleum Corporation plans to construct a 10-inch. 81 km pipeline in south-east Turkey, between Dodan and Bati Raman, with planned completion in the last quarter of 1982.

Foreign currency requirements for this project will be supplied from the proceeds of a World Bank loan.

Pipeline construction contractors who would like to bid for this project will be prequalified. The pipeline will be welded API 5L x 60 pipe and will transport carbon dioxide at a pressure of 1,750 psi as part of the Bati Raman enhanced oil recovery project. The route contains significant quantities of rock ditch.

Potential contractors should apply to the following address before 6:00 pm. September 25, 1981. giving:

- A description of the contractor and its affiliations;
- A list of pipeline projects completed showing size, length, location, precise work done and the name and address of the owner of the pipeline;
- Summary of the contractor's resources including men and equipment. Present location of equipment and a brief description of proposed logistics and schedule should be included.

TURKISH PETROLEUM CORPORATION
Att: Mr. Mumin Gurses, Production Group
Mudafa Cad. No. 22, Ankara, Turkey

CALL FOR TENDERS

OPEN TO GEOPHYSICAL COMPANIES

The Government of the Democratic Republic of Madagascar has obtained from the International Association for Development (AID), of the World Bank Group, a credit to finance operations related to a Petroleum Research Project.

This international invitation for tenders launched by the OFFICE MILITAIRE NATIONAL POUR LES INDUSTRIES STRATEGIQUES (OMNIS) has as objective to carry out seismic work in the region of MOROMBE, in the MORONDAVA basin of Madagascar, with a total length of profiles of 813 kilometres, for the year 1982.

Interested geophysical companies, originating in countries which are members of the World Bank, or AID, or Switzerland, may obtain without cost the complete dossier from:

PETROCONSULTANTS S.A.
8-10, rue Muzy
P.O. Box 228
1211 GENEVA 6—SWITZERLAND

After 15 August 1981

INTERNATIONAL BIDDING

BRASWEY S.A. INDUSTRIA E COMERCIO

is looking for manufacturers of *machines and equipment destined* for the production of vegetable oils, to modernise and enlarge his industrial plant located in Cambe and Maringa (Pr).

The interested manufacturers may write to:

Rua Enxovia, 423/455 Sao Paulo SP, Brazil, CEP 04711

INTERNATIONAL BIDDING

MENEGAZ S.A. INDUSTRIA E COMERCIO

foreseeing the implantation of an Industrial unit located in Passo Fundo, Estado do Rio Grande do Sul, is interested in acquiring machines and equipment for the agricultural machine industry. The purpose of this communication is to invite interested parties to present their proposals in writing to the following address:

Rua Tiradentes, 440 CEP 99.100 Passo Fundo, RS, Brazil

INTERNATIONAL BIDDING

BIANCHINI S.A. INDUSTRIA, COMERCIO E AGRICULTURA

Foreseeing the implementation of a new facility located in Canoas—Rio Grande do Sul, is interested in acquiring machinery and equipment for production of vegetable oils. *The purpose o fthis communication* is to invite interested parties to present their proposals in writing to the following address:

Praça Senador Florencio 12-11°A CEP 90.000 Porto Alegre, RS, Brazil

JOINT RECEIVERS OF TUDOR VEHICLE IMPORTS (UK) LTD.

FOR SALE BY TENDER

Stock of Registered — Unregistered Vehicles *Components*

Comprising: Over 80 4-wheel drive Aro and Tudor Panel Vans. Pick-ups, Hard Tops, Soft Tops and Estate Cars, newly imported and standing ex Gildersome (near Leeds). Importers stock of mechanical spares, engines, gearboxes etc., body panels.

FOR SALE AS ONE LOT BY TENDER

Also available: 2 good Portakabin Offices and quality office furniture and garage equipment.

Closing date: 11 am Friday, 18th September 1981
Viewing: On the following days only—2nd, 3rd and 4th September between 10 am and 4 pm and all parties must make prior arrangement to view

Catalogues 60p to include postage from the Joint Agents:
T. SAXTON & COMPANY
53 Queen Street, Sheffield 1. Tel: 0742 77635
WALKER SINGLETON
18/20 Rawson Street, Halifax. Tel: 0422 64311

INTERNATIONAL BIDDING

BORELLA AVICOLA LTDA.

Foreseeing the implementation of an industrial unit located Marau-RS, *Brazil is interested in acquiring machines and equipment for the* industrialisation of fowl meat. The purpose o fthis communication is to invite interested parties to tender their proposals in writing to the following address

Ruz Du que de Caxias No. 3, CEP 99.150, Marau, RS Brazil

COMPANY NOTICES

BRASCAN LIMITED
(Incorporated under the laws of Canada)

NOTICE IS HEREBY GIVEN that the Board of Directors of this Company has declared a quarterly dividend of forty cents (40 cents) per share (in Canadian funds) on the Company's Class A, Class B and Class C Convertible Ordinary shares without nominal or par value, payable October 31, 1981 to shareholders of record at the close of business on October 1, 1981.

The dividend payable on Class A Convertible Ordinary shares represented by share warrants to bearer will be paid only against surrender of such bearer warrants (with coupons serial Nos. 154/160, both inclusive with talons attached) in exchange for Bearer International Depositary Receipts issued by Morgan Guaranty Trust Company of New York at Brussels, Belgium in respect of Class C Convertible Ordinary shares of the Company or for registered share certificates of the Company. Bearer Warrants (with coupons serial Nos. 154/160, both inclusive and talons attached) may be surrendered for exchange to:

C I K,
59, Rue de Namur,
1000 Brussels
or
Morgan Guaranty Trust Company of New York,
35, Avenue des Arts,
1040 Brussels.

Dated at Toronto, Canada, the 18th day of August, 1981.

By Order of the Board
L. A. ALLEN
Vice-President and Secretary

The transfer agents of the Company are National Trust Company, Limited, Toronto, Montreal, Vancouver, Calgary, Winnipeg and Halifax, Canada, and Citibank, N.A., New York, N.Y., U.S.A. Changes of address should be notified promptly to National Trust Company, Limited at 21 King Street East, Toronto, Canada M5C 1B3.

BANQUE NATIONALE DE PARIS
Floating Rate Note issue of $US75 million
February 1978/84

The rate of interest applicable for the six month period beginning August 21 1981 and set by the reference agent is 19% annually.

JUTLAND-FUNEN ELECTRICITY CONSORTIUM (ELSAM)
U.S.$10,000,000 5¼% 20 YEAR EXTERNAL LOAN OF 1964

Bondholders of the above loan are advised that the Redemption due the 15th September, 1981, i.e. U.S.$770,000 nominal has been effected by purchase. The outstanding balance after this redemption is U.S.$2,300,000.

HAMBROS BANK LIMITED
24th August, 1981.

TRAVEL

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CONTRACTS & TENDERS

APPEAR EVERY MONDAY
THE RATE IS £24.50
PER SINGLE COLUMN CENTIMETRE

UK NEWS

Inventor cuts into the instruments market

By Lisa Wood

MR JACK HOSKIN, aged 61, is of that very special breed of men whose *inventiveness stems* from a life's history in industry coupled with years of "fiddling" in the garage at weekends.

His new Luton-based business which manufactures titanium opthalmic surgical instruments mainly for export to the U.S., started as a hobby ten years ago.

He was inspired by a meeting with a Harley Street ophthalmic surgeon, Mr Dermot Pierse, who is now a shareholder in the company, Microsurgical Administrative Services (MAS) whose instruments have the trade mark Micra.

"He told me he had never been satisfied with any of his instruments," said Mr Hoskin. "A very inventive man himself, he suggested I watched him operate."

The two men pooled their experiences and started refining instruments already in the market, dominated by West German and Swiss manufacturers.

They used stainless steel—the conventional material—but Mr Hoskin started experimenting with different materials. He wanted something which did not stain, would not reflect light under the microscope and which would make up a well-balanced light instrument.

"The conclusion was that *stainless steel was not the* material we needed. Titanium, which at the time was being used in the aircraft industry, fitted the bill. "Titanium is lighter than stainless steel, yet harder and can be coated with a special non-reflective oxide in a range of colours," he said.

Titanium, however, has unusual properties and was difficult to machine so Mr Hoskin, whose main company, Applied Chromotography Systems, of Luton, makes analytical instruments, set about developing new machining techniques in his spare *time*.

Mr Hoskin, who started his career as a tool maker in the aircraft industry and who then spent many years in vacuum tube manufacturing, is reluctant to discuss these, as competors are very keen to learn them.

Suffice to say he developed the techniques, drawing upon his knowledge of metallurgy and chemistry.

"Whenever I have a problem with a material I go through my repertoire of what I worked on in the past and *the nsee what fits*," he said.

Others whose aid was enlisted in the venture included an electronic engineer and the British Aircraft Corporation which sold the company scraps of titanium for experimentation.

Originally there was no intention to manufacture instruments.

"We thought we would design them, do clinical trials and then trot off to an instrument manufacturer offering them in exchange for a small royalty," *Mr Hoskin said.* "We thought we could then retire to our garages and fiddle with other new ideas."

Surgical instrument manufacturers, however, were not impressed with the commercial potential of the instruments. "They told us instruments had taken 350 years to develop within the industry and titanium could not be used," said Mr Hoskin. "So we either had to drop the idea or take it seriously."

The company was incorporated in 1976. Turnover at the *time was about £10,000 and sales* to surgeons were done on a personal basis. Now sales in the UK are handled by a major wholesaler.

It took 18 months to raise the capital needed to fully-fledge the company. Midland Montague Industrial Finance, Venture Capital, which has a 25 per cent share in the company, provided some £50,000 and the rest came from the bank.

Much of the money was for research into improved manufacturing techniques. At present the work is contracted out to a *Cambridge company* and it was hoped the switch over to MAS manufacturing its own instruments would have occurred early this year.

But success in the U.S. market, where last year MAS set up a joint marketing operation with a surgeon avoiding the normal distribution network and cutting mark-up prices, has meant manufacture had to be stepped up. MAS, run at Luton by four people, hopes to start its own manufacturing at the end of this year.

Exports to the U.S. reached $400,000 *last* year and this year are expected to exceed $500,000. The company hopes to have a total turnover of $650,000 in 1981-82. About 80 per cent of sales will be in the U.S. where sales are growing very quickly.

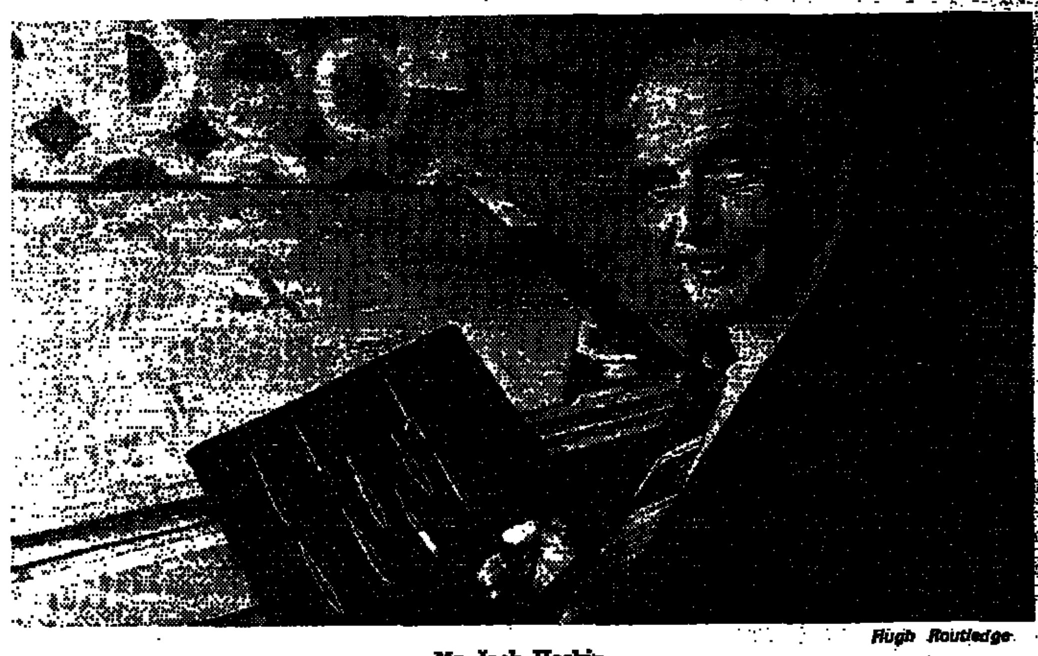
None of the three shareholders take dividends as every penny is ploughed back into the business. However, Mr Hoskin said that with the particularly strong U.S. demand there was a temptation to see the company as a source of income. His other company employs 35 people.

Demand in the U.S. has been particularly stimulated by the strong collaboration with U.S. surgeons. One instrument, launched in the U.S. this year, was developed specially for a U.S. operative procedure, not accepted in the UK, called keratotomy, where shortsightedness is corrected surgically.

This close working relationship with surgeons and the desire to respond to new operative techniques, Mr Hoskin believes, has led to his company's success. "We were not hide-bound by traditional methods," he said.

This new product illustrates how MAS has responded to recent trends. A substance called healon is now being used for eye operations. It is a rubbery and slippery fluid and coats surgical instruments, making them difficult to grip. MAS has developed a tungsten surface coating on instruments which overcomes this problem.

Mr Hoskin emphasises the logic of details in his products. For example, instruments have holes in the gripping area to give them a better grip. If the instrument is slippery the slight depression of the surgeon's plastic glove into the hole can give a better grip. "It's silly little points like that which make all the difference," Mr Hoskin concluded.



Hugh Routledge

Mr Jack Hoskin

THE NEW ENTREPRENEURS

INSURANCE

How realistic values are assessed on life business

BY ERIC SHORT

THE LIFE and composite insurance sectors have been rather dull in the stock market during recent years. But this year there has been unusual interest in these shares on takeover rather than earnings prospects.

Earlier in the year West Germany's leading direct insurance company, Allianz Versicherung, acquired a near 30 per cent shareholding in Eagle Star. Liberty Life Association of South Africa built up a 20 per cent holding in Sun Life Assurance. Last week came the first full bid — made by Winterthur Swiss Insurance for Provident Life Association of London, a small life company with general insurance subsidiaries.

In each case the buyers' motives were much the same in that they were attracted to the high returns that are available in the UK and the easy regulatory climate.

The defence offered by both Eagle Star and Provident Life was that the market grossly undervalued the value of the shareholders' interests in the life business. Indeed, the companies themselves have made no attempt in the past to show a realistic value of the life business in company accounts. Eagle Star in its 1980 accounts valued its life business at £100,000, when it was generating annual profits of £12m.

This raises the question of how to assess a realistic value for life business so that it reflects the value to shareholders. Much more attention is going to be paid to this question in the coming months.

Life assurance business operates quite differently from other forms of commercial activity. On one side of the balance-sheet is the liabilities of the life fund—sums due in the years ahead with the period of liabilities, in the case of pensions business, stretching well into the 21st century. On the other side of the balance-sheet are the assets held to meet those liabilities.

With traditional life business it is the responsibility of the actuary to calculate the excess of the value of the assets over the liabilities, and to recommend to his board the amount of profit that can be distributed between policyholders and shareholders. In some compan the split is defined precisely—usually 90 per cent to policyholders and 10 per cent to shareholders.

The actuary in performing his valuation has to make certain assumptions about future rates of interest, mortality and expenses. His methods can rarely be followed except by other actuaries.

The usual method adopted by stockbrokers' analysts in valuing life business is to start with the profit transferred from the life funds to the profit and loss account, and to capitalise this by multiplying by a factor — the earnings multiply. It is a matter of the analysts judgment as to the value put on the multiplier.

The starting point is the two pure traditional life companies, Equity and Law and Sun Life which transact ordinary life and pensions business with a comparatively small amount of unit-linked business. Their share price values earnings on a multiple of around 30. This is considered to be the top end of the market.

This is then used as the yardstick for valuing all other life business.

Then the analyst adjusts the multiple to allow for the different mix of business from the two standard companies. Legal and General has a large proportion *of pensions business.* Phoenix has a very high chunk of non-profit business on which all profits belong to the shareholders. Industrial life business is treated separately from ordinary life business and valued on a much lower multiple — usually about 15.

Thus companies like the Pru and L and G could be valued on a multiple of 20. It depends very much on what the analysts describe as the "quality" of earnings, a highly subjective judgment.

BUSINESSMAN'S DIARY

UK TRADE FAIRS AND EXHIBITIONS

Date	Title	Venue
Current	Motorcycle Show—BIKE '81 (01-385 1200) (until Aug 31)	Earls Court
Aug 23-26	International Craft and Hobby Fair (04252 72711)	Wembley Conference Centre
Aug 23-28	Solar World *Forum—International Energy Society* Congress and Exhibition (01-493 6601)	Brighton
Sept 3-5	Business and Light Aviation Show (01-643 8040)	Cranfield Airfield
Sept 6-9	Wholesale Jewellery Buyers' Autumn Fair (0935 20721)	The White House Regents Park
Sept 6-10	Watch, Jewellery and Silver Trades Fair (01-643 8040)	Earls Court
Sept 8-10	Laboratory 81 Exhibition (0799 22612)	Grosvenor House, W1
Sept 8-11	International Carpet Fair (01-839 5041)	Exhibition Centre, Harrogate
Sept 11-13	National CB Show (01-437 1002)	Old Horticultural Halls, SW1
Sept 13-16	MAB International Menswear Fair (01-404 0801)	Earls Court
Sept 15-17	Industrial Environment Show (01-686 6339)	Olympia
Sept 15-22	International Plastics Exhibition—INTERPLAS (021-705 6707)	National Exhibition Centre, Birmingham
Sept 15-18	Offshore Europe 81 Exhibition and Conference (01-549 5831)	Aberdeen
Sept 15-26	Chelsea Antiques Fair (0727 56069)	Town Hall
Sept 20-23	London Sports Trade Show (01-353 4090)	Earls Court
Sept 21-26	International Garage Equipment Trade Exhibition GARAGEQUIP '81 (01-235 7090)	Olympia
Sept 22-23	CCC Business Studies: First National Credit Management Convention and Exhibition (021-643 3539)	Warwick

OVERSEAS TRADE FAIRS AND EXHIBITIONS

Date	Title	Venue
Aug 24-28	International Public Works and Municipal Services Exhibition—CIVICON (01-486 1951)	Johannesburg
Aug 25-Sept 2	International Exhibition of Agriculture, Machinery and Produce (01-486 1951)	Mexico
Aug 28-Sept 6	International Fair of Consumer Goods (01-874 6034)	Stockholm
Aug 29-Sept 2	International Fair (01-734 0543)	Frankfurt
Sept 4-13	International Radio and TV Exhibition (01-540 1101)	Berlin
Sept 5-8	International Exhibition of Sports Goods and Outdoor Activities (01-439 3964)	Paris
Sept 6-12	International Autumn Fair (01-493 3111)	Leipzig
Sept 9-12	Electronic Packaging Exhibition—INTERNEPCON (01-390 0281)	Taipei
Sept 9-17	International Engineering Fair (01-278 0281)	Brno
Sept 18-20	International Trade Fair for Tableware, China, Glassware, Cutlery and Metalware Accessories (01-204 7116)	Salzburg
Sept 11-20	International Autumn Fair (01-486 1951)	Zagreb
Sept 14-18	SE Asian Production Machinery and Engineering *Equipment Exhibition (01-486 1951)*	*Singapore*

BUSINESS AND MANAGEMENT CONFERENCES

Date	Title	Venue
Aug 24-29	National Association of Corporate Real Estate Executives: Investment Opportunities in the Northeast U.S. (Germany Tel. 4189509 bretd.)	Boston, Mass.
Aug 25	Management Training Consultants: Modular Approach to Supervisory Training (0533 27062)	Aberdeen
Sept 3	Citizens' Rights Office: Income Maintenance and the Personnel Officer's Job (01-405 5942)	Cora Hotel, WC1
Sept 7	British Computer Society: Query Languages for the End User (01-637 0471)	Mount Royal Hotel
Sept 10	IPS: Materials for industry—present and future (0990 23711)	Europa Hotel, W1
Sept 10-12	Institute of Local Government Administrators: Employment—the Local Government Response (0206 45212)	Birmingham
Sept 13-26	Seatrade *Academy Anatomy of Shipping* (0223 353451)	Cambridge
Sept 15	CBI Introducing single status employment—what's the difference? (01-379 7400)	Centre Point
Sept 15	The Henley Centre for Forecasting Revitalise your market thinking (01-353 9961)	London Press Centre
Sept 16-17	Financial Times Euro - Korean Symposium (01-621 1355)	Brussels
Sept 17-18	The Economist International Oil Supplies and Stockpiling Conference (01-839 7000)	Hamburg
Sept 17	Freight Transport Association National Conference Efficiency in the '80s (0892 26171)	Wembley Conference Centre
Sept 17	Institute of Directors The financial and legal implications of management buy-outs (01-839 1233)	Pall Mall, SW1
Sept 21-23	DIBC UK/Tullett and Riley Foreign exchange and money market dealing (01-788 5126)	Great Eastern Hotel, EC2
Sept 22	IPS Materials Management (0990 23711)	Europa Hotel, W1
Sept 22-24	IBM Planning and control for data processing managers (01-864 5373)	Gatwick
Sept 23-26	International Bar Association The future of London arbitration (01-930 6432)	Waldorf Hotel, WC1
Sept 28-29	MSS Computer and Business Consultancy Computer appreciation for managers/users (Worthing 34755)	Worthing
Sept 28-29	AMR International Advanced executive secretaries (01-262 2732)	Helsinki
Sept 29	Dun and Bradstreet More effective collection technique for credit controllers and supervisors (01-247 4377)	Café Royal, W1
Sept 29-Oct 1	Thames Water Disposal of Sludge to Sea (01-837 3300)	University College, London
Oct 8-9	Dept. of Energy Fifth National Energy Management Conference—Energy Conservation—the key to competitiveness (01-211 3000)	National Exhibition Centre, Birmingham

Anyone wishing to attend any of the above events is advised to telephone the organisers to ensure that there has been no change in the details published.

WORLD STOCK MARKETS

Indices

NEW YORK —DOW JONES

	Aug. 21	Aug. 20	Aug. 19	Aug. 18	Aug. 17	Aug. 14	1981 High	1981 Low	Since Cm'pil't' High	Since Cm'pil't' Low
♦Indu str'ls	920.57	928.37	928.48	924.57	926.75	936.93	1024.05 (27/4)	920.57 (21/8)	1051.70 (11/1/73)	41.22 (2/7/32)
H'me Bnds.	58.86	58.06	59.19	58.48	58.76	58.70	65.78 (15/1)	58.57 (7/8)	—	—
Transport.	395.79	399.24	399.44	399.31	405.75	408.87	447.58 (16/4)	379.18 (20/2)	447.58 (16/4/81)	12.23 (8/7/32)
Utilities	112.75	113.21	113.51	113.06	113.65	114.67	117.81 (6/1)	103.98 (5/5)	163.32 (20/4/69)	10.5 (28/4/42)
Trading Vol 000-1	37,679	37,678	39,390	47,270	40,840	42,580	—	—	—	—

♦Day's high 930.65. low 917.14.

	Aug. 14	Aug. 7	July 31	Year ago (approx)
Ind. div. yield %	5.90	5.85	5.74	5.63

STANDARD AND POORS

	Aug. 21	Aug. 20	Aug. 19	Aug. 18	Aug. 17	Aug. 14	1981 High	1981 Low	Since Cmpil't'n High	Since Cmpil't'n Low
Indust'ls	145.46	147.17	148.88	146.44	147.62	149.08	157.02 (6/1)	145.20 (22/7)	160.96 (26/11/80)	3.52 (30/6/32)
Composite	129.25	130.88	130.45	130.11	131.22	132.49	138.12 (6/1)	126.58 (20/2)	140.52 (26/11/80)	4.40 (1/6/32)

	Aug. 19	Aug. 12	Aug. 5	Year ago (approx)
Ind. div. yield %	4.85	4.75	4.76	4.72
Ind. P/E Ratio	9.33	9.54	9.52	8.36
Long Gov. Bond yield	13.67	13.51	13.91	11.10

N.Y.S.E. ALL COMMON

Aug. 21	Aug. 20	Aug. 19	Aug. 18	1981 High	1981 Low
75.10	75.88	75.73	75.55	79.14 (6/1)	72.45 (20/2)

Rises and Falls	Aug. 21	Aug. 20	Aug. 19
Issues Traded	1,877	1,877	1,881
Rises	410	771	728
Falls	1,030	643	711
Unchanged	447	463	442
New Highs	—	16	11
New Lows	—	33	41

MONTREAL

	Aug. 21	Aug. 20	Aug. 19	Aug. 18	1981 High	1981 Low
Industrials	392.54	396.59	387.57	398.75	409.56 (27/5)	356.28 (20/2)
Combined	350.94	355.57	354.73	355.21	375.28 (15/6)	338.34 (20/2)
TORONTO Composite	2246.1	2282.1	2266.1	2276.2	2576.3 (10/4)	2151.4 (20/2)

NEW YORK ACTIVE STOCKS

Friday	Stocks traded	Closing price	Change on day
Cities Service	809,600	66⅛	+1⅛
ATT	581,400	57⅝	+⅛
Boeing	543,700	25⅜	−1⅛
Pan-Am Air	472,100	3	+⅛
Jhsn and Jhsn	440,100	31¾	−1
Sony	422,600	20¼	−⅛
Arlen Rlty	396,600	1⅞	—
Cenco Corp	357,200	10⅞	−⅛
Superior Oil	355,700	40⅞	−½
Duke Power	353,400	19⅞	−⅛

	Aug. 21	Aug. 20	Aug. 19	Aug. 18	1981 High	1981 Low
AUSTRALIA All Ord. (1/1/80)	645.0	655.6	656.4	656.5	737.5 (6/4)	625.0 (5/8)
Metal & Minrls (1/1/80)	555.5	560.0	568.8	554.6	755.2 (7/1)	508.4 (5/8)
AUSTRIA Credit Aktien (2/1/62)	54.0	57.40	57.46	57.64	66.45 (6/1)	54.0 (21/8)
BELGIUM Belgian SE (31/12/63)	75.0	74.67	74.72	74.36	86.15 (17/2)	69.53 (18/8)
DENMARK Copenhagen SE (1/1/73)	117.9	118.07	118.26	118.80	118.80 (18/8)	95.88 (2/1)
FRANCE CAC General (29/12/61)	82.7	81.0	81.5	82.7	112.6 (17/3)	77.5 (15/6)
Ind Tendance (31/12/80)	86.7	85.1	85.6	86.7	106.8 (13/5)	79.2 (12/6)
GERMANY FAZ-Aktien (31/12/58)	240.4	241.53	241.99	240.41	248.47 (6/7)	215.38 (9/2)
Commerzbank (Dec 1953)	756.5	757.5	737.2	735.1	749.0 (6/7)	666.4 (16/2)
HOLLAND ANP-CBS General (1970)	86.5	86.8	95.1	95.5	95.8 (20.8)	85.7 (2/1)
ANP-CBS Indust (1970)	75.7	73.4	72.9	72.9	75.4 (22/6)	62.8 (2/1)
HONG KONG Hang Seng Bank (31/7/64)	1715.8	1795.78	1728.71	1706.54	1810.20 (17/7)	1295.44 (11/5)
ITALY Banca Comm Ital (1972)	231.9	229.59	232.28	228.15	282.03 (5/6)	166.44 (24/7)
Japan Dow Average (16/5/49)	7995.26	7972.96	7961.62	7949.36	8019.14 (17/8)	6956.52 (13/3)
Tokyo New SE (4/1/68)	602.15	602.07	602.47	599.12	605.92 (17/8)	495.79 (5/1)
NORWAY Oslow SE (1/1/72)	141.7	142.45	140.95	140.84	145.72 (6/8)	110.34 (3/6)
SINGAPORE Straits Times (1966)	724.97	718.79	704.81	727.97	973.26 (26/6)	859.51 (2/7)
SOUTH AFRICA Gold 1958)	618.0	616.3	637.4	618.1	797.8 (7/1)	473.8 (6/7)
Industrial (1958)	655.8	654.4	652.6	651.0	654.4 (20/8)	557.2 (5/2)
SPAIN Madrid SE (30/12/80)	144.6	143.45	142.20	141.44	144.6 (21/8)	100.46 (2/1)
SWEDEN Jacobson & P. (1/1/58)	653.7	651.75	617.45	607.66	660.31 (10/8)	404.17 (20/1)
SWITZERLAND SwissBankCpn. (31 12/58)	287.8	267.4	285.4	286.0	304.2 (2/4)	273.8 (27/6)
WORLD Capital Intl. (1/1/70)	—	154.2	155.9	153.8	162.5 (6/1)	149.0 (23/7)

Base values of all indices are 100 except Australia All Ordinary and Metals—500: NYSE All Common—50: Standard and Poors—10; and Toronto—1,000: the last named based on 1975. † Excluding bonds. ‡ 400 industrials. § 400 industrials plus 40 Utilities, 40 Financials and 20 Transports. c Closed. u Unavailable.

Financial Rand US$0.83 (Discount of 21⅞%)

ABN may tap Asian capital

By Charles Batchelor in Amsterdam

ALGEMENE Bank Nederland (ABN) sees this week's listing of its shares on the Singapore Stock Exchange as opening the way for the bank ultimately to tap the Asian capital market.

It is already quoted on 10 European exchanges but the diversification of its loan portfolio and foreign office network suggests a need to obtain share listings outside Europe, said Dr Andre Batenburg, chairman of the managing board.

ABN has obtained an "introductory listing," amounting to an additional listing of its capital rather than a new public issue. Singapore's expanding economy makes it attractive as a financial centre, to be called upon when there is a need for capital, said Dr Batenburg.

ABU notes strong interest in Singapore for acquiring European and particularly guilder bonds. It expects turnover in guilder securities will benefit from the introduction of its shares.

The Singapore authorities have allowed ABN to introduce its shares in the normal bearer form despite the local system of registered shares. The exchange has co-operated over listing requirements.

The Singapore Securities Industry Council has recommended that the Exchange consider relaxing listing requirements for reputable companies which are already listed on a recognised stock exchange.

Haggie lifts interim earnings by 25%

BY JIM JONES IN JOHANNESBURG

PROFITS of Haggie, the South African wire rope and industrial products manufacturer, benefited from the country's upsurge in capital spending and from acquisitions in the six months to June 30.

First-half pre-tax profits rose 24.9 per cent to R27.82m ($29.5m), from R22.28m in the first half of last year. The earnings compare with R46.64m for the whole of 1980. First-half turnover was R154.7m ($164m), against an interim figure of R117m in 1980 and R262.2m for the year.

With effect from July 1, Haggie acquired 45 per cent of Macdem, which is South Africa's largest manufacturer of copper, brass and bronze semi-manufactured products. At the same time, 25 per cent of the stainless steel and non-ferrous products distributor, R. Jackson, was acquired. The price of these two acquisitions was R24.5m, and holdings in the two companies can be increased to 50 per cent at a minimum price of R7.9m on July 1, 1984. After September 1, 1984, full control can be acquired at a minimum price of R32.5m.

An interim dividend of 20 cents has been declared, from first-half earnings of 87 cents a share. Last year the interim dividend was 15 cents, and first-half earnings 70 cents a share. The year to last December 31 resulted in earnings of 144 cents a share and at total dividend of 50 cents.

Nikko Securities

IN THE table accompanying the article on Japanese securities companies in the issue of August 19, Nikko Securities' share of underwriting in Samurai bond issues in Japan during the period October 1980 to June 1981 was given as 12.7 per cent out of the total for the four leading Japanese securities companies. This figure was based on the value of issues in which Nikko acted as lead manager. Nikko's share of all Samurai bond issue underwriting during the same period was 23.7 per cent.

Nikko's share of foreign investment in Japanese stocks was estimated at 20.7 per cent of the total for the "big four." The company states that a reliable estimate of its share is 22.6 per cent on the basis of numbers of shares traded. On a value basis Nikko's share is estimated at 26.6 per cent.

Nikko's share of Japanese investment in foreign stocks handled by the "big four" during the period is estimated at 2.6 per cent. The company points out, however, that the total value of such investment was only Y47.2bn, or 1 per cent of investment in Japanese stocks during the same period.

Returns available to Japanese investors in overseas stocks remain well below those available on investment in the Japanese domestic market, according to Nikko.

Fortia plans U.S. funding

By Our Financial Staff

FORTIA, the Swedish pharmaceuticals group with big interests in biotechnology, plans a dual rights issue this autumn to raise SKr 147m ($28m).

The exercise will extend the amount of Fortia capital freely available to foreign investors, and so too will plans, scheduled for the end of this year or early 1982, to issue additional shares in the U.S.

The existing par value of Fortia shares is to be split from SKr 50 to SKr 10. This will be followed by a scrip issue, and two rights issues at prices ranging from SKr 65 to SKr 50 a share. Both bonus and rights offers will be on a one-for-10 basis.

The company's plans to issue shares in the U.S. centre on a further increase in its non-restricted capital. Some 3m new shares will be involved.

Fortia accompanies these financing proposals with a re-affirmation that sales for 1981 are expected to grow by around 15 per cent to SKr 1.4bn.

Dyno Industrier in Dutch deal

By Fay Gjester in Oslo

DYNO INDUSTRIER, a Norwegian group which makes chemicals, plastics and explosives, has doubled its stake in a 700,000 tonnes per year methanol production complex at Delfzijl, in the Netherlands, in a deal with two major Dutch groups, Akzo and DSM.

CURRENCIES, MONEY and GOLD

Bank reveals almost all

BY COLIN MILLHAM

IT WAS a novel experience last Thursday to be able to look at a Reuter Monitor screen and find out exactly how the London money market was progressing almost from minute to minute. It was almost as good as the Test Match score telephone service. No longer is one faced with trying to put together several factors at the end of the day, described as small, moderate, large, etc., in order to work out a coherent picture.

The terms used to be so vague that anyone outside the discount market found it almost impossible to get a clear idea of day-to-day money flows from the published information.

Any estimates of what was happening could easily be up to £100m out, and with several factors, plus the scale of intervention all described in the same terms, the end result was utter confusion as more than one market analyst found to their annoyance.

But not any longer. Starting Thursday the Bank of England now publishes every morning, on an official input to the Reuter Monitor service, a forecast in pounds sterling of the likely surplus or shortage of money market funds.

The day's factors, such as take-up of Treasury bills —£50m, or decrease in the note circulation +£80m, are also given. There is still a problem, however, in that certain factors can change fairly dramatically during the day. It can even happen that an expected surplus fails to appear, and the early estimate of factors will have to be revised quite significantly.

It is also true that not all the factors will always be revealed by the authorities, and in that case no amount of juggling with the figures will produce the official forecast.

On the other hand the exact amount of intervention by the authorities is now known each day, while the move towards increased disclosure of information is certainly a step in the right direction. It can only be hoped that eventually the true state of the market at the end of the day will be revealed, because on Friday an expected surplus of £80m finished up as an apparent shortage of £120m. But it must be admitted that the authorities are still faced with difficulties following the unwinding of the civil service dispute.

THE POUND SPOT AND FORWARD

Aug 21	Day's spread	Close	One month	% p.a.	Three months	% p.a.
U.S.	1.8570-1.8800	1.8750-1.8770	0.85-1.05c dis	−6.40	2.10-2.20dis	−4.58
Canada	2.2500-2.2650	2.2600-2.2615	1.60-1.70c dis	−8.76	4.20-4.40dis	−7.61
Nethlnd.	5.09-5.13	5.09½-5.10½	¼c pm-½ dis	−0.29	¾-¼ pm	0.39
Belgium	74.30-75.00	74.50-74.60	85-95c dis	−14.49	155-170 dis	−8.72
Denmark	14.39-14.49	14.40-14.42	7½-8¾ore dis	−6.87	15⅞-17⅜ dis	−4.61
Ireland	1.2545-1.2610	1.2550-1.2565	0.26-0.39p dis	−3.10	0.87-1.08dis	−3.10
W. Ger.	4.57½-4.62	4.58½-4.59½	½pf pm-par	0.65	2-1½ pm	1.52
Portugal	122.75-124.00	123.65-123.85	60-145c dis	−9.94	165-360 dis	−8.48
Spain	184.25-185.25	184.75-184.95	100-130c dis	−7.46	230-285 dis	−5.57
Italy	2,294-2,307	2,304-2,306	42-44lire dis	−22.39	113-116dis	−19.87
Norway	11.37-11.45	11.40½-11.41½	2⅛-1⅜ore pm	1.97	3½-2½ pm	1.01
France	10.98-11.05	11.00-11.02	17-18c dis	−19.07	32-34 dis	−11.99
Sweden	9.74-9.81	9.79-9.80	1½-2½ore dis	−2.30	1¼-2½ dis	−0.71
Japan	424-428	426-427	2.40-2.10y pm	6.33	6.85-6.55 pm	6.28
Austria	32.15-32.40	32.20-32.25	6-2gro pm	1.49	15-5 pm	1.24
Switz.	3.98-4.02	3.99-4.00	1¾-1½c pm	4.13	4¼-4¾ pm	4.50

Belgian rate is for convertible francs. Financial franc 79.90-80.00. Six-month forward dollar 3.85-3.95c dis. 12-month 6.10-6.30c dis.

THE DOLLAR SPOT AND FORWARD

Aug 21	Day's spread	Close	One month	% p.a.	Three months	% p.a.
UK†	1.8570-1.8800	1.8750-1.8770	0.95-1.05c dis	−6.40	2.10-2.20dis	−4.58
Ireland†	1.4815-1.4910	1.4830-1.4910	0.35-0.45c dis	−3.22	0.45-0.60dis	−1.41
Canada	1.2065-1.2093	1.2065-1.2068	0.32-0.37c dis	−3.42	0.86-0.91dis	−2.93
Nethlnd.	2.7150-2.7425	2.7150-2.7250	1.45-1.35c pm	6.17	3.45-3.35 pm	4.99
Belgium	39.65-40.02	39.65-39.75	30-40c dis	−10.55	42-52 dis	−4.72
Denmark	7.6950-7.7570	7.6950-7.7050	¼-½ore dis	−0.58	par-½ dis	−0.13
W. Ger.	2.4450-2.4700	2.4450-2.4475	1.43-1.42pf pm	7.11	3.70-3.64 pm	6.06
Portugal	65.65-66.10	65.65-65.85	par-40c dis	−3.65	15-115 dis	−3.95
Spain	98.60-99.20	98.85-99.00	par-15c dis	−0.91	10-30 dis	−0.81
Italy	1,226-1,233¾	1,226-1,228	16-17½lire dis	−16.35	45-49 dis	−15.30
Norway	6.0800-6.1235	6.0800-6.0900	4½-3¾ore pm	7.89	8-7½ pm	5.09
France	5.8650-5.9200	5.8675-5.8775	6-7c dis	−13.28	10-12 dis	−7.49
Sweden	5.2160-5.2475	5.2200-5.2300	1.80-1.60ore pm	3.90	4.80-4.60 pm	3.60
Japan	226.75-228.75	227.05-227.25	2.50-2.35y pm	12.81	6.30-6.15 pm	10.96
Austria	17.16-17.36	17.19½-17.20¼	11.80-10.30gro pm	7.71	27¼-23¼ pm	5.87
Switz.	2.1250-2.1575	2.1270-2.1300	2.03-1.93c pm	11.16	5.08-4.98 pm	9.45

† UK and Ireland are quoted in U.S. currency. Forward premiums and discounts apply to the U.S. dollar and not to the individual currency.

GOLD

	Aug. 21		Aug. 20	
Gold Bullion (fine ounce)				
Close	$430-432	(£230-231)	$429-431	(£230½-231½)
Opening	$429-431	(£230-231)	$434-436	(£233½-234¾)
Morning fixing	$428.50	(£229.820)	$430.50	(£232.201)
Afternoon fixing	$429.50	(£229.128)	$429	(£230.274)
Gold Coins				
Krugerrand	$445-446	(£237¾-238¼)	$442-443	(£237¾-238¼)
1/2 Krugerrand	$233-234	(£124½-125)	$231-232	(£124¼-124¾)
1/4 Krugerrand	$118-119	(£63-63½)	$119-120	(£64-64½)
1/10 Krugerrand	$49-50	(£26¼-26¾)	$48-49	(£25¾-26¼)
Mapleleaf	$444-445	(£237¼-237¾)	$441-442	(£237¼-237¾)
New Sovereigns	$107-108	(£57-57¾)	$106½-107½	(£57¼-57¾)
King Sovereigns	$118-120	(£63¼-64¼)	$118½-120½	(£63½-64½)
Victoria Sovs	$118-120	(£63¼-64¼)	$118½-120½	(£63½-64½)
French 20,s	$124-129	(£66¼-69)	$123-128	(£66½-68½)
50 pesos Mexico	$536-539	(£286¼-288)	$533-536	(£286½-288½)
100 Cor. Austria	$419-422	(£223¾-225½)	$414-418	(£222¾-225)
$20 Eagles	$566-570	(£302½-304½)	$568-573	(£305½-308¼)

† Rate given for Argentina is the commercial rate. The financial rate for sterling is 14.170-14.190 and for the dollar 7.550-7.600. * Selling rate.

OTHER CURRENCIES

Aug. 21	£	$		£ Note Rates
Argentina Peso	9679-9699†	5166-5186†	Austria	32.15-32.45
Australia Dollar	1.6265-1.6305	0.8680-0.8685	Belgium	79.20-80.00
Brazil Cruzeiro	187.89-188.89	100.49-100.99	Denmark	14.54-14.59
Finland Markka	8.540-8.555	4.5530-4.5650	France	11.00-11.20
Greek Drachma	110.361-113.760	60.15-60.35	Germany	4.57½-4.62½
Hong Kong Dollar	11.01-11.02	5.8950-5.9050	Italy	2270-2315
Iran Rial	150.00*	81.50*	Japan	425-450
Kuwait Dinar (KD)	0.525-0.531	0.2830-0.2835	Netherlands	5.08-5.13
Luxembourg Fr	74.50-74.60	39.65-39.75	Norway	11.36-11.48
Malaysia Dollar	4.4225-4.4325	2.3675-2.3705	Portugal	121-125
New Zealand Dlr.	2.2520-2.2570	1.2020-1.2030	Spain	181½-192½
Saudi Arab. Riyal	6.34-6.40	3.4185-3.4215	Sweden	9.74-9.84
Singapore Dollar	4.0325-4.0425	2.1590-2.1620	Switzerland	3.98-4.02
Sth. African Rand	1.7615-1.7645	0.9390-0.9405	United States	1.86½-1.88½
U.A.E. Dirham	6.81-6.87	3.6715-3.6735	Yugoslavia	74½-83

† Rate given for Argentina is the commercial rate. The financial rate for sterling is 14,098-14,118 and for the dollar 7,520-7,600. * Selling rate.

EURO-CURRENCY INTEREST RATES (Market closing Rates)

Aug. 21	Sterling	U.S. Dollar	Canadian Dollar	Dutch Guilder	Swiss Franc	West German Mark	French Franc	Italian Lira	Belgian Franc Convertible	Japanese Yen
Short term	12½-12⅝	17⅝-17⅞	21½-22½	13⅝-13⅞	¾-1	11⅝-11⅞	18-32	18-25	30-50	6½-6¾
7 days' notice	12⅞-13⅛	17¾-18	21½-22½	13½-13¾	17½-18	11⅞-12	25-35	34½-39½	31-41½	6¾-7
Month	13 7/16-13 9/16	19⅜-19⅝	21¾-22⅛	13½-13⅝	8 7/16-8 11/16	12 1/16-12¼	30-35	34½-36½	28-31	6⅞-7⅛
Three months	14 1/16-14 3/16	18½-18¾	21⅝-21¾	13½-13⅝	9-9⅛	12⅜-12½	25½-27½	33¾-34¾	22½-24	7 1/16-7 3/16
Six months	14¼-14⅜	18½-18¾	20¾-21⅛	13¼-13⅜	9 5/16-9 7/16	12 5/16-12 7/16	22-24	31½-32½	20-21½	7-7⅛
One Year	14 1/16-14 3/16	17¾-18	19¾-20⅛	12 15/16-13 1/16	8⅞-9	12⅜-12½	20-22	29-30	18½-19½	7⅞-8⅛

SDR linked deposits: one-month 17 11/16-18 1/16 per cent; three months 16¾-16⅞ per cent; six months 16-16⅜ per cent; one-year 15¾-15¾ per cent.
ECU linked deposits: one-month 19⅞-20 per cent; three months 17 15/16-18 5/16 per cent; six months 17-17⅜ per cent; one-year 16½-16⅞ per cent.

Asian $ (closing rates in Singapore): one-month 19 11/16-19 9/16 per cent; three months 18 13/16-18 15/16 per cent; six months 18⅝-18⅞ per cent; one-year 17 15/16-18 1/16 per cent. Long-term Eurodollar two years 16⅞-17 per cent; three years 16½-16¾ per cent; four years 16⅜-16⅝ per cent; five years 16¼-16½ per cent; nominal closing rates.

The following nominal rates were quoted for London dollar certificates of deposit: one-month 18.15-18.25 per cent; three months 18.20-18.30 per cent; six months 18.25-18.35 per cent; one-year 17.40-17.50 per cent.

FT LONDON INTERBANK FIXING (11.00 a.m. AUGUST 21)

3 months U.S. dollars		6 months U.S. dollars	
bid 18 9/16	offer 18 11/16	bid 18 5/8	offer 18 3/4

The fixing rates are the arithmetic means, rounded to the nearest one-sixteenth, of the bid and offered rates for $10m quoted by the market to five reference banks at 11 am each working day. The banks are National Westminster Bank, Bank of Tokyo, Deutsche Bank, Banque Nationale de Paris and Morgan Guaranty Trust.

LONDON MONEY RATES

Aug. 21 1981	Sterling Certificate of deposit	Interbank	Local Authority deposits	Local Auth. negotiable bonds	Finance House Deposits	Company Deposits	Discount Market Deposits	Treasury Bills ♦	Eligible Bank Bills ♦	Fine Trade Bills ♦
Overnight	—	12-15	12½-12⅞	—	—	12⅛-12¾	12-12½	—	—	—
2 days notice	—	—	13⅛-13⅜	—	—	—	—	—	—	—
7 days or	—	—	—	—	—	—	—	—	—	—
7 days notice	—	12¾-15	13¼-13⅜	—	13¼	12⅞-13¾	—	—	—	—
One month	13 9/16-13 11/16	13 9/16-13 11/16	13½	14½-14¼	13⅝	13¾-13⅞	12⅛	12¾	12¾-12 27/32	14¼
Two months	13 11/16-13 13/16	13⅝-13 11/16	—	14½-14⅛	13⅞	—	12¾	13 1/16	13 1/16	14
Three months	13 15/16-13¾	13 15/16-14⅛	14	14½-14⅛	14 1/16	14⅝	13-13⅛	13¼-13 7/16	13 1/16	14
Six months	14-13⅞	14⅛-14 3/16	14⅛	13½-13¼	14¼	—	13¼	—	13¼	14½
Nine months	14 1/16-13⅞	14 3/16-14 5/16	—	14⅜-14	14¼	—	—	—	—	—
One year	14 1/16-13⅞	14 3/16-14 5/16	14⅜	14¼-14	14¼	—	—	—	—	—
Two years	—	—	14⅝	—	—	—	—	—	—	—

Local authorities and finance houses seven days' notice others seven days' fixed. Long-term local authority mortgage rates nominally three years 14¾ per cent; four years 14 per cent; five years 14¼ per cent. ♦ Bank bill rates in table are buying rates for prime paper. Buying rates for four-month bank bills 13 7/16-13½ per cent four months trade bills 14 per cent.

Appropriate selling rate for one-month Treasury bills 12⅝ per cent; two months 13 1/16 per cent three months 13½-13⅝ per cent. Approximate selling rate for one-month bank bills 12⅝-12 11/16 per cent two months 13 1/16 per cent and three months 13 3/16 per cent, one month trade bills 14 per cent two months 13¾ per cent and three months 13¾ per cent.

Finance Houses Base Rates (published by the Finance Houses Association) 13½ per cent from August 1, 1981. Clearing Bank Deposit Rates for sums at seven days' notice 9 per cent. Clearing Bank Rates for lending 12 per cent. Treasury Bills: Average tender rate of discount 13.2463 per cent.

CURRENCY RATES

Aug. 21	Bank rate %	Special Drawing Rights	European Currency Unit
Sterling	—	0.607436	0.548777
U.S. $	14	1.13348	1.02868
Canadian $	21.03	1.36675	1.24182
Austria Sch.	6¾	19.5967	17.7190
Belgian F.	13	45.2712	40.9261
Danish K.	11	8.77314	7.90954
D mark	7½	2.79323	2.51934
Guilder	9	3.10460	2.79699
French Fr.	9½	6.69660	6.04351
Lira	19	1395.31	1264.25
Yen	6¼	259.454	234.179
Norwgn. Kr.	9	6.93916	6.25439
Spanish Pts.	8	112.158	101.840
Swedish Kr.	12	5.95020	5.36555
Swiss Fr.	5	2.42678	2.19675
Greek Dr'ch.	20½	—	62.0552

PENDING DIVIDENDS

For the convenience of readers the dates when some of the more important company dividend statements may be expected in the next few weeks are given in the following table. The dates shown are those of last year's announcements, except where the forthcoming board meetings (indicated thus*) have been officially published. It should be emphasised that dividends to be declared will not necessarily be at the amounts or rates per cent shown in the column headed "Announcement last year."

	Date	Announcement last year
APV	Sept 25	Int. 2.8
Armstrong Equipment	Sept 24	Final 1.72
*BBA	Aug 27	Int. 0.84
*Associated Dairies	Aug 26	Final 2.25
*BICC	Sept 9	Int. 3.03
BSR	Sept 10	Int. nil
BTR	Sept 8	Int. 5.25
*Babcock Intl.	Sept 1	Int. 3.4
*Bank of Scotland	Sept 22	Int. 8.0
Berkeley Hambro	Sept 25	Int. 3
*Bilton (Percy)	Oct 1	Int. 2.5
*Blackwood Hodge	Sept 10	Int. 1
*Blue Circle	Aug 26	Int. 5.0
Booker McConnell	Sept 16	Int. 1.25
*Bowater	Sept 9	Int. 4.35
Brit. Elec. Traction	Sept 4	Final 5.709
*British Petroleum	Sept 3	Int. 6.25
British Vita	Sept 10	Int. 2.6
Brixton Estate	Sept 25	Int. 1.46
Brown Bros.	Aug 27	Final 1.1
Burmah Oil	Sept 17	Int. 1.5
*Cadbury Schweppes	Sept 3	Int. 1.2
Cement Roadstone	Aug 27	Int. 2.1
*Charterhse.	Sept 3	Int. 1.75
Cons. Gold Fields	Sept 17	Final 15.0
Costain	Sept 4	Int. 4.0
Dalgety	Sept 17	Final 11.0
DRG	Sept 22	Int. 3
Dunlop	Sept 25	Int. 2.65
Eagle Star	Sept 17	Int. 5.0
European Ferries	Sept 19	Int. 1.725
*Fairclough Const.	Aug 25	Int. 1.65
*Fisons	Sept 21	Int. 6.9
Grattan Warehouses	Sept 24	Int. 1.866
*Guardian Royal Exch.	Sept 2	Int. 6.0
GKN	Sept 18	Int. 4.0
Harrisons Malay Ests.	Sept 10	Final 5.5
Hawley Leisure	July 22	Int. 0.6
*Hepworth Ceramic	Sept 10	Int. 2.25
*Hongkong S'hai Bk.	Aug 25	Int. HK$0.18
House of Fraser	Sept 2	Int. 2.0
Howden (A.)	Sept 25	Int. 3.5
*IMI	Sept 8	Int. 2.0
Kleinwort Benson	Sept 23	Int. 3
Laporte Inds.	Sept 19	Int. 3.5
*Lead Inds.	Sept 10	Int. 3.7
Legal and General	Sept 17	Int. 3.0
*Linfood	Aug 28	Final 7.5
London Merch. Secs.	Sept 16	Final 0.8
*Marchwiel	Sept 2	Int. 2.4
Mills and Allen Int.	Sept 24	Final 11¶
Morgan Crucible	Sept 4	Int. 4.5
NEI	Sept 4	Int. 1.25
Nurdin and Peacock	Sept 10	Int. 1.875
*Pearl Assce.	Aug 26	Int. 7.0
Pearson Longman	Sept 9	Int. 3.75
Pearson (S.)	Sept 9	Int. 3.75
P & O	Sept 10	Int. 3.0
Phoenix Assce.	Sept 3	Int. 6.5
*Prudential Corpn.	Sept 10	Int. 4.0
Rnsm. Sims & Jefferies	Sept 22	Int. 3.14
*Raybeck	Aug 28	Final 3.169
Reckitt and Colman	Sept 9	Int. 3.5
RTZ	Sept 17	Int. 5.5
Rowntree Mackintosh	Sept 18	Int. 2.5
*Sime Darby	Aug 27	Final 17
Simon Engng.	Sept 15	Int. 4.0
*Slough Ests.	Aug 26	Int. 1.1
Stand. Chartd. Bank	Sept 9	Int. 12.0
Steetley	Sept 18	Int. 4
*Sun Alliance	Sept 2	Int. 15.0
*Tarmac	Sept 21	Int. 5.5
Tilling (T.)	Sept 10	Int. 3.5
Travis and Arnold	Sept 15	Int. 0.64
Tricentrol	Sept 17	Int. 2.8
*Turner and Newall	Sept 10	Int. 3.0
UDS	Sept 18	Int. 2.6
Utd. Biscuits	Sept 11	Int. 1.87
Vickers	Sept 25	Int. 4.55
*Wagon Finance	Aug 28	Int. 0.625
Weir Group	Sept 3	Int. 1.863
*Willis Faber	Sept 15	Int. 3.8
Wimpey (G.)	Sept 25	Int. 0.85
Yorkshire Chems.	Aug 28	Int. nil

* Board meeting intimated. † Rights issue since made. ‡ Tax free. § Scrip issue since made. ¶ Forecast.

Public Works Loan Board rates

Effective August 22

Years	Quota loans repaid by EIP†	A‡	at maturity§	Non-quota loans A* repaid by EIP†	A‡	at maturity§
Up to 5	14⅝	14⅞	14⅞	15½	15¼	15⅞
Over 5, up to 10	14⅞	15⅛	15⅛	15⅜	15⅝	15⅝
Over 10, up to 15	15¼	15⅛	15⅛	15⅞	15⅞	15⅝
Over 15, up to 25	15⅛	15⅛	15	15⅝	15⅝	15⅝
Over 25	15⅛	15	15	15⅝	15½	15½

* Non-quota loans B are 1 per cent higher in each case than non-quota loans A. † Equal instalments of principal. ‡ Repayment by half-yearly annuity (fixed equal half-yearly payments to include principal and interest). § With half-yearly payments of interest only.

RECENT ISSUES

EQUITIES

[illegible]

FIXED INTEREST STOCKS

[illegible]

"RIGHTS" OFFERS

[illegible]

FT UNIT TRUST INFORMATION SERVICE

OFFSHORE & OVERSEAS—contd.

Guinness Mahon Fd. Mgrs. (Guernsey)
PO Box 188, St. Peter Port, Guernsey. 0481 23506.
Intl. Fund ... $19.80 20.46 ... 11.20
Prices at July 30. Next dealing August 27.

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FT UNIT TRUST INFORMATION SERVICE

AUTHORISED UNIT TRUSTS

Abbey Unit Tst. Mngrs. (a)
72-80, Gatehouse Rd., Aylesbury. 0296 5941

Abbey Am. Gtn. Tst.	68.5	73.6	+1.1	1.97
Abbey Capital	53.1	57.4	-0.6	3.83
Abbey General	64.0	68.1xd	-0.3	4.50
Abbey Gilt & F.I. Tst.	99.6	104.8	+0.3	12.50
Abbey Income	38.4	47.5xd	-0.1	8.45
Abbey W'wd.Bd.Tst.	96.7	102.3	-0.5	6.54
Abbey Inv. Ts. Fd.	59.4	63.1xd	.....	3.80
Equitas Prog. Tst.	91.5	98.9	-0.4	4.13

Allen Harvey & Ross Unit Tst. Mngrs.
45, Cornhill, London EC3V 3PB. 01-623 6314.

AHR Gilt Trust	83.3	87.6xd	.....	13.20

Allied Hambro Ltd. (a) (g)
Hambro Hse., Hutton, Brentwood, Essex.
01-589 2851 or Brentwood (0277) 211459

Balanced Funds				
Allied 1st	96.2	102.9xd	-0.4	5.48
Brit. Inds. Fund	82.5	88.7	-0.2	5.79
Growth & Income	56.7	60.7	-0.2	4.12
Elect. & Ind. Dev.	50.5	54.0	-0.3	4.44
Allied Capital	109.1	116.7	-0.7	3.77
Hambro Fund	145.7	155.9	-0.4	5.14
Hambro Acc. Fund	207.4	222.0	-0.9	3.69
Income Funds				
High Yield Fd.	69.1	73.9xd	.....	8.72
High Income	87.9	94.1	-0.1	6.80
Equity Income Fd.	49.5	53.0xd	-0.1	6.96
Govt. Secs.	23.6	24.3	+0.1	12.76
International Funds				
International	40.7	43.6xd	-0.4	1.95
Japan Fund	33.2	35.5	-0.1	0.46
Pacific Fund	83.6	89.5	-0.5	1.16
Secs. Of America	92.4	98.9	-0.6	2.45
Specialist Funds				
Smaller Co.'s Fd.	61.1	65.4	+0.1	3.59
2nd Smlr. Co's Fd.	76.5	81.9	-0.1	3.66
Recovery	30.0	32.1	-0.1	4.39
Met. Min. & C'dty.	71.4	76.4	-0.6	4.80
Overseas Earnings	82.1	87.9	-0.5	4.66
Exempt Funds				
Income Exempt	54.7	57.4	.....	7.93
Far East Exempt	90.4	94.0	-0.5	1.19
Smaller Co. Exempt	102.3	107.4	.....	3.68
U.S.A. Exempt	146.7	152.6	-0.6	2.42

Anderson Unit Trust Managers Ltd.
158, Fenchurch St., EC3M 6AA. 623 9231

Anderson U.T.	76.4	82.2	.....	3.01

Ansbacher Unit Mgmt. Co. Ltd.
1, Noble St., EC2V 7JA. 01-726 4931

Inc. Monthly Fund	165.0	175.0xd	.....	—
Leics &Gen.Fd.	56.0	58.0	.....	6.82

Anthony Wieler Unit Tst. Mgmt. Ltd.
19, Widegate St., London, E1 7NP. 01-247 8827

Wieler Gwth Fd. Inc.	44.65	47.00	.....	3.20
Do. Accum.	56.84	59.83	.....	3.20

Arbuthnot Securities Ltd. (a)(c)
37, Queen St., London, EC4R 1BY. 01-236 5281

Capital†	37.4	40.7	.....	—
Commodity***	96.6	105.2	.....	2.02
(Accumulation)	152.6	166.3	.....	2.02
(10% Withdrawal)	70.1	76.4	.....	2.02
Eastern & Internat'l	59.4	64.6	-0.1	1.00
(6% Withdrawal)	40.6	44.2	-0.2	1.00
Extra Income	85.3	92.9	.....	8.87
(Accumulation)	107.4	117.0	.....	8.87
Finance & Property*	26.4	28.7	.....	3.70
Foreign††	150.6	165.6	.....	1.00
Giants	50.1	54.6	-0.4	2.74
(Accumulation)	66.6	72.4	-0.6	2.74
Gilt & Fixed	37.7	40.1xd	+0.2	12.38
(Accumulation)	43.1	45.9xd	+0.4	12.38
Growth	43.9	47.8	-0.3	3.10
(Accumulation)	58.6	63.8	-0.5	3.10
High Income	35.6	38.8xd	-0.1	9.36
(Accumulation)	62.8	68.4xd	-0.1	9.36

Craigmount Unit Tst. Mgrs. Ltd.
Bucklersbury, London EC4N 8BD. 01-248 4984

High Income	35.9	39.2xd	-0.2	11.60
North American	70.2	75.8	-0.1	2.24
Canadian Exempt*	79.3	83.9	.....	2.74
Canadian Trust	71.2	76.9	-0.7	2.29
Mid Mount High Inc.*	47.2	49.9xd	.....	9.65
Recovery	58.5	62.9	-0.3	6.73
Gilt Trust	39.8	42.7xd	+0.1	13.92

*Weekly dealing day Wednesday.

Crescent Unit Tst. Mngrs. Ltd. (a)(g)
4 Melville Cres., Edinburgh 3 031-226 4931

Cres. Amer. Fd.	48.1	51.9	-0.2	0.48
Cres. Internat'l.	98.0	105.8	.....	1.42
Cres. High. Dist.	44.9	48.4	-0.2	9.24
Cres. Reserves	55.1	59.5xd	-0.2	5.04
Cres. Tokyo	44.9	48.4	+0.1	0.26

Dartington Unit Trust Mngt. Ltd.
Bridge Chambers, Barnstaple, Devon 0271 76324

Total Perf. Unit Tst.	24.1	25.6	.....	8.95

Discretionary Unit Fund Managers
36/38 New Broad St, EC2M 1NU. 01-638 4485

Disc. Inc. Aug 6	251.9	268.6	.....	4.96

E. F. Winchester Fund Mngt. Ltd.
44, Bloomsbury Square, WC1A 2RA 01-623 8893

Great Winchester	18.8	20.9xd	.....	8.30
Gt. Winchester O'seas	30.8	34.2xd	.....	3.40

For Emson and Dudley see Robert Fraser Tst. Mgmt.

Equity & Law Un. Tr. M. (a) (b) (c)
Amersham Rd., High Wycombe. 0494 33377

Equity & Law	100.4	105.6	-0.6	4.10

Fidelity International Management Ltd.
62-63 Queen St, London EC4 1AD 01-248 4891

American (z)	42.8	46.1	-0.1	0.39
Amer. Spec. Sits. (z)	31.9	34.4	+0.1	1.05
Gilt + Fixed Int.	23.0	24.1	+0.1	13.40
Growth + Income	35.8	38.6	-0.2	6.49
Maximum Inc. Eq. Tst.	50.8	53.2	-0.2	8.23
Special Sits.	44.1	47.5	-0.3	1.19

James Finlay Unit Trust Mngt. Ltd.
10-14, West Nile Street, Glasgow. 041-204 1321

J. Finlay Internat'l	43.9	47.2	.....	1.18
Accum. Units	54.6	58.7	.....	1.18
J. Finlay High Income	38.4	41.3	.....	8.69
Finlay Wld. Energy	20.7	22.3	-0.2	1.14
Accum. Units	26.8	28.8	-0.3	1.14
J. Finlay Fd. In. Tst.	43.3	46.5	.....	4.33
Accum. Units	56.1	60.3	.....	4.33

Prices on Aug. 19. Next dealing Aug. 26.

Framlington Unit Mgt. Ltd. (a)
64, London Wall, EC2M 5NQ. 01-628 5181

Amer. & Gen.	98.6	105.4xd	-0.4	0.24
Am. T'around	90.8	97.0	-0.4	1.50
(Accum. Units)	90.8	97.0	-0.4	1.50
Capital Tst.	69.0	73.6	-0.2	4.53
(Accum. Units)	72.8	77.8	.....	4.53
Convertible & Gilt	48.2	50.6	.....	10.04
(Accum. Units)	49.2	51.6	.....	10.04
Extra Income Trust	54.2	57.8xd	-0.2	8.32
Income Tst.	45.6	48.6	.....	6.63
Int. Growth Fd.	77.6	83.0	-0.4	1.13
(Accum. Units)	83.6	89.4	-0.4	1.13

Robert Fraser Trust Mgt. Ltd.
28b Albemarle St., W.1. 01-493 3211

Robt. Fraser Ut. Tst.	81.5	87.7	.....	6.00

Friends' Provdt. Trust Mgrs. (a) (b) (c).
Pixham End, Dorking. 0306 5055

Friends Prov. Units	71.4	76.3	-0.4	3.56
Do. Accum.	104.3	111.5	-0.5	3.96

Funds in Court*
Public Trustee, Kingsway, WC2. 01-405 4300

Capital Aug 13	165.7	165.9	.....	4.28
Gross Inc. Aug. 13	84.1	88.4	.....	11.08
High Yield Aug 13	101.6	104.7	.....	10.07

*Unauth. Restricted to monies under Court control.

G.T. Unit Managers Ltd.
16, Finsbury Circus, EC2M 7DJ. 01-628 8131

G.T. Cap. Income	164.7	177.0	+0.4	2.50
Do. Acc.	213.4	229.4	+0.5	2.50
G.T. Inc. Fd. Un.	222.4	239.1	+0.6	7.90
G.T. U.S. & Gen.	237.7	255.5	-8.0	1.30
GT Wld. Bd. Fd.	102.0	106.2	-0.8	7.20
G.T. Japan & Gen.	138.7	149.1	+1.2	0.70

Lloyd's Life Unit Tst. Mngrs. Ltd.
2, St. Mary Axe, EC3A 8BP. 01-623 6114

Equity Accum. (2)	281.9	296.8	.....	3.66

Local Authorities' Mutual Invest. Tst.*
77, London Wall, EC2N 1DB. 01-588 1815

Property Fd. July 31		150.80	.....	6.91
Wider Fund July 31		289.05	.....	4.74
Narrower Fd. July 31		72.70	.....	14.02

*Unauthorised. Available only to Local Authorities.

M & G Group (y)(c)(z)
Three Quays, Tower Hill, EC3R 6BQ. 01-626 4588

American	76.9	82.3xd	-1.2	2.15
(Accum. Units)	83.2	89.0	-1.3	2.15
American Recovery	86.0	92.0	-1.2	1.42
(Accum. Units)	88.8	95.0	-1.2	1.42
Australasian	104.4	111.7xd	-3.5	1.33
(Accum. Units)	109.7	117.4	-3.7	1.33
Commodity	139.2	148.9xd	-0.9	3.09
(Accum. Units)	165.2	176.8	-1.2	3.09
Compound Growth	201.8	217.9	-0.5	2.88
Conversion Growth	131.7	140.9	-0.6	2.74
Conversion Income	78.6	84.1xd	-0.1	8.39

Schroder Unit Trust Managers Ltd.
48, St. Martins Lane, WC2. Dealings 0705 27733

Capital	194.0	208.6	-0.8	2.20
(Accum. Units)	251.2	270.0	-1.0	2.20
Income Fnd.	239.2	257.1	-0.4	7.51
(Accum. Units)	423.0	454.8	-0.6	7.51
Gen.	142.9	153.6xd	-0.5	3.52
(Accum. Units)	196.3	211.0	-1.0	3.52
Europe	23.2	24.9	-0.1	2.74
(Accum. Units)	27.7	29.7	-0.1	2.74
Smaller Co.'s	167.1	179.6	-0.5	2.25
American	57.3	61.6	-0.3	0.55
(Accum. Units)	57.3	61.6	-0.3	0.55
Tokyo	63.6	68.4	-1.6	0.17
(Accum. Units)	63.6	68.4	-1.6	0.17
Gilt & Fixed	43.6	45.8xd	+0.1	12.15
(Accum. Units)	46.7	49.1	.....	12.15
Australian	50.3	59.0	-0.3	2.87
(Accum. Units)	54.7	58.8	-0.3	2.87
*Ph.&C. Fd. Aug. 18	274.7	289.1	.....	4.42
*Recovery August 18	331.6	349.0	.....	3.99
*Spec. Ex. Aug. 13	521.7	572.1	.....	1.99
*Euro. Exempt Aug 13	119.2	125.4	.....	1.57

*For tax exempt funds only.

Cannon Assurance Ltd.
1 Olympic Way, Wembley HA9 0NB 01-902 8876

Hill Samuel Life Assur. Ltd.
NLA Twr., Addiscombe Rd., Croy. 01-686 4355

♦Property Units	245.1	257.9	.....	—
Property Series A	150.3	158.3	.....	—
Managed Units	218.9	230.4	+0.6	—
Managed Series A	127.8	134.5	+0.5	—
Managed Series C	111.6	117.5	+0.3	—
Money Units	154.7	162.9	.....	—
Money Series A	123.4	129.9	.....	—
Fixed Int. Fund	113.5	119.5	+0.4	—
Equity Fund	123.7	135.1	+0.2	—
Pns. Managed Cap.	183.5	193.2	.....	—
Pns. Managed Acc.	216.0	227.5	.....	—
Pns. G'teed. Cap.	136.7	143.9	.....	—
Pns. G'teed. Acc.	153.0	169.5	.....	—
Pens. Equity Cap.	144.2	151.8	.....	—
Pens. Equity Acc.	161.6	170.1	.....	—
Pns. Fxd. Int. Cap.	113.6	119.6	.....	—
Pns. Fxd. Int. Acc.	127.4	134.1	.....	—
Pens. Prop. Cap.	120.4	126.8	.....	—
Pens. Prop. Acc.	134.6	141.7	.....	—
Indexed Secs. Cap.	90.3	95.1	.....	—
Indexed Secs. Acc.	90.8	95.6	.....	—
British Fund	106.0	111.6	.....	—
Capital Fund	109.3	115.1	.....	—

INSURANCE PROPERTY BONDS

OFFSHORE & OVERSEAS FUNDS

Continued on previous page

FT SHARE INFORMATION SERVICE

BRITISH FUNDS

"Shorts" (Lives up to Five Years)

Interest Due	Stock	Price £	Last xd	Yield Int.	Yield Red.
[illegible]					

Five to Fifteen Years

Over Fifteen Years

Undated

INT. BANK AND O'SEAS GOVT. STERLING ISSUES

CORPORATION LOANS

COMMONWEALTH AND AFRICAN LOANS

LOANS

Public Board and Ind.

Financial

FOREIGN BONDS & RAILS

AMERICANS

CANADIANS

BANKS AND HIRE PURCHASE

Dividends Paid		Stock	Price	Last xd	Div Net	C'vr	Y'ld Gr's	P/E
Jan.	July	ANZ $A1	330	15.6	tQ24c	3.6	4.4	6.2
Feb.	Aug.	Alexanders D. £1	235	24.7	17.0	—	10.3	—
May	Aug.	Algemene Fl.100	£58xd	18.8	tgQ26%	1.9	8.8	5.9
Oct.	Apr.	Allen Harvey £1	347	16.3	23.0	—	9.5	—
Dec.	June	Allied Irish	100	1.6	Q43.9%	5.5	8.5	3.1
	July	Ansbacher (H.) 5p	17	1.6	0.15	—	1.3	—
Jan.	Aug.	Arbuthnot L. £1	300	29.6	12.0	—	5.7	—
July	Jan.	Bk. Ireland £1	280	18.5	Q38.9%	—	8.0	—
May	Nov.	Bk. Leumi $0.1	4½	13.10	NQ12%	—	3.9	—
Aug.	Feb.	Bk. Leumi (UK) £1	250xd	10.8	10.15	—	5.8	—
Jan.	July	Bk. N.S.W. $A1	196	15.6	♦tQ18c	2.9	5.9	5.8
Nov.	May	Bank Scotland £1	440	1.5	17.5	5.2	5.7	3.6
Apr.	Oct.	Barclays £1	460xd	10.8	†18.5	5.5	5.7	3.7
Jan.	July	Brown Shipley £1	220	29.6	h6.5	—	4.2	—
Jan.	July	Cater Ryder £1	330xd	10.8	23.1	—	10.0	—
Feb. Ap. Sep.		Charterhouse Gp.	85	10.4	4.51	1.7	7.6	(9.6)
May	Nov.	Clive Dis'nt 20p	37	1.5	1.5	—	5.8	—
Mar.	Oct.	Com'l Aus. ($A1)	943	16.3	♦Q20c	♦	2.8	♦
	May	Com'zbk DM 10	600	6.5	—	—	—	—
	March	C'hgn. Hbk. Kr100	900	24.3	Q14%	—	10.9	—
	May	Cred. France F100	£13½	178	Q17¼%	—	12.7	—
Jan.	Apr.	Dawes (G. R.)	14	18.10	—	—	—	—
	May	Deutsche Bank DM50	£61½	14.5	tQ31¼%	—	5.4	—
Mar.	Aug.	♦Dunbar Grp. £1	525xd	10.8	†6.2	5.0	1.7	16.9
June	Nov.	First Nat. 10p	34	974	—	—	—	5.7
	—	Do. Wrnts. 75-83	3¼	—	—	—	—	—
June	Dec.	Gerrard Natnl	277	1.5	14.0	—	7.2	—
Mar.	Aug.	Gillett Bros. £1	243	23	17.71	—	10.4	—
	April	Goode D'l Mry. 5p	37	23	0.75	—	2.9	—
Nov.	April	Grindlays	226xd	10.8	4.13	4.1	2.6	10.1
[illegible]								

Hire Purchase, etc.

BEERS, WINES AND SPIRITS

BUILDING INDUSTRY, TIMBER AND ROADS

CHEMICALS, PLASTICS

DRAPERY AND STORES

ELECTRICALS

ELECTRICALS—Continued

ENGINEERING MACHINE TOOLS

FOOD, GROCERIES, ETC.

FOOD, GROCERIES—Cont.

HOTELS AND CATERERS

INDUSTRIALS (Miscel.)

INDUSTRIALS—Continued

INSURANCE

INSURANCE—Continued

LEISURE

MOTORS, AIRCRAFT TRADES

Motors and Cycles

Commercial Vehicles

Components

Garages and Distributors

NEWSPAPERS, PUBLISHERS

PAPERS, PRINTING ADVERTISING

PROPERTY

PROPERTY—Continued

SHIPPING

SHOES AND LEATHER

SOUTH AFRICANS

TEXTILES

TOBACCOS

TRUSTS, FINANCE, LAND

Investment Trusts

INVESTMENT TRUSTS—Cont.

Finance, Land, etc.

OIL AND GAS

OIL AND GAS—Continued

OVERSEAS TRADERS

RUBBERS AND SISALS

TEAS

India and Bangladesh

Sri Lanka

Africa

MINES

Central Rand

Eastern Rand

Far West Rand

O.F.S.

Finance

Diamond and Platinum

Central African

MINES—Continued

Australian

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's
—	Acmex 50c	40	—	32.5c	—	3.6
—	ACM 20c	35	—	—	—	—
—	Argosy Gold NL 25c	12	—	—	—	—
—	Bond Corp.	205	—	Q10c	6	3.0
Nov. Apr.	Bougainville Kina1	95	7.3	Q25.6c	1.6	‡
—	CRA 50c	245	16.3	Q17c	1.7	4.7
—	Canada Northwest	36	—	—	—	—

Tins

Copper

Miscellaneous

NOTES

Unless otherwise indicated, prices and net dividends are in pence and denominations are 25p. Estimated price/earnings ratios and covers are based on latest annual reports and accounts and, where possible, are updated on half-yearly figures. P/Es are calculated on "net" distribution basis, earnings per share being computed on profit after taxation and unrelieved ACT where applicable; bracketed figures indicate 10 per cent or more difference if calculated on "nil" distribution. Covers are based on "maximum" distribution; this compares gross dividend costs to profit after taxation, excluding exceptional profits/losses but including estimated extent of offsettable ACT. Yields are based on middle prices, are gross, adjusted to ACT of 30 per cent and allow for value of declared distribution and rights.

- "Tap" Stock.
- Highs and Lows marked thus have been adjusted to allow for rights issues for cash.
- † Interim since increased or resumed.
- ‡ Interim since reduced, passed or deferred.
- ‡‡ Tax-free to non-residents on application.
- Figures or report awaited.
- USM; not listed on Stock Exchange and company not subjected to same degree of regulation as listed securities.
- †† Dealt in under Rule 163(2)(a): not listed on any Stock Exchange and not subject to any listing requirements.
- Dealt in under Rule 163(3).
- Price at time of suspension.
- ¶ Indicated dividend after pending scrip and/or rights issue: cover relates to previous dividend or forecast.
- Merger bid or reorganisation in progress.
- Not comparable.
- Same interim: reduced final and/or reduced earnings indicated.
- § Forecast dividend; cover on earnings updated by latest interim statement.
- Cover allows for conversion of shares not now ranking for dividends or ranking only for restricted dividend.
- Cover does not allow for shares which may also rank for dividend at a future date. No P/E ratio usually provided.
- ‖ No par value.

Yield based on assumption Treasury Bill Rate stays unchanged until maturity of stock. Available only to UK pension schemes and insurance companies engaged in pension business. a Tax free. b Figures based on prospectus or other official estimate. c Cents. d Dividend rate paid or payable on part of capital; cover based on dividend on full capital. e Redemption yield. f Flat yield. g Assumed dividend and yield. h Assumed dividend and yield after scrip issue. j Payment from capital sources. k Kenya. m Interim higher than previous total. n Rights issue pending. q Earnings based on preliminary figures. s Dividend and yield exclude a special payment. t Indicated dividend: cover relates to previous dividend, P/E ratio based on latest annual earnings. u Forecast dividend: cover based on previous year's earnings. v Tax free up to 30p in the £. y Dividend and yield based on merger terms. z Dividend and yield include a special payment: Cover does not apply to special payment. A Net dividend and yield. B Preference dividend passed or deferred. C Canadian. E Minimum tender price. F Dividend and yield based on prospectus or other official estimates for 1981-82. G Assumed dividend and yield after pending scrip and/or rights issue. H Dividend and yield based on prospectus or other official estimates for 1982. K Figures based on prospectus or other official estimates for 1981-82. L Dividend and yield based on prospectus or other official estimates for 1980. N Dividend and yield based on prospectus or other official estimates for 1981. P Figures based on prospectus or other official estimates for 1982. Q Gross. T Figures assumed. Z Dividend total to date.

Abbreviations: xd ex dividend; xc ex scrip issue; xr ex rights; xa ex all; xc ex capital distribution.

REGIONAL MARKETS

The following is a selection of London quotations of shares previously listed only in regional markets. Prices of Irish issues, most of which are not officially listed in London, are as quoted on the Irish exchange.

			IRISH		
Albany Inv. 20p	45	.....	Conv. 9% '80/82	£92¼	.....
Bertrams	10	.....	Nat. 9¼% 84/89	£89½	.....
Bdg'wtr. Est. 50p	465	.....	Fin. 13% 97/02	£90	-½
Craig & Rose £1	430	.....	Alliance Gas	67	.....
Finlay Pkg. 5p	22	.....	Arnott	120	.....
Grate Ship. £1	425	.....	Carroll (P.J.)	82	.....
Higsons Brew	65	.....	Concrete Prods.	91	+2
Holt (Jos) 25p	478	.....	Heiton (Hldgs.)	30½	.....
I.O.M. Stm. £1	200	.....	Irish Ropes	120	.....
Pearce (C. H.)	120	.....	Jacob	63	.....
Peel Hldgs.	100	.....	T.M.G.	25	.....
Sheff. Refrshmt.	53½	.....	Unidare	75½	-5
Sindall (Wm.)	194	.....			

OPTIONS

3-month Call Rates

Industrials					
A. Brew	6½	House of Fraser	14	Utd. Drapery	6½
BOC Intl.	12	I.C.I.	26	Vickers	18
B.S.R.	7	"Imps"	7	Woolworths	6
Babcock	22	I.C.L.	6	**Property**	
Barclays Bank	35	Ladbroke	30	Brit. Land	6
Beecham	25	Legal & Gen.	20	Cap. Counties	12
Blue Circle	35	Lex Service	10	Land Secs.	37
Boots	20	Lloyds Bank	35	MEPC	25
Bowaters	24	"Lots"	6½	Peachey	15
Brit. Aerospace	17	London Brick	6	Samuel Props.	13
B.A.T.	25	Lucas Inds.	13	Town & City	2½
Brown (J.)	9	"Mams"	23	**Oils**	
Burton Grp.	14	Mrks. & Spncr.	8	Brit. Petroleum	33
Cadburys	7½	Midland Bank	25	Burmah Oil	16
Courtaulds	7	N.E.I.	10	Charterhall	5
Debenhams	10	Nat. West. Bank	30	KCA	22
Distillers	17	P & O Dfd.	18	Premier	12
Dunlop	6½	Plessey	30	Shell	35
Eagle Star	25	Racal Elect.	35	Tricentrol	30
F.N.F.C.	3	R.H.M.	5	Ultramar	44
Gen. Accident	30	Rank Org. Ord.	10	**Mines**	
Gen. Electric	60	Reed Intnl.	25	Charter Cons.	21
Glaxo	55	Sears	5	Cons. Gold	45
Grand Met.	20	Tesco	5½	Lonrho	9
G.U.S. "A"	45	Thorn EMI	35	R.T.Z.	45
Guardian	50	Trust Houses	15		
G.K.N.	15	Tube Invest.	16		
Hawker Sidd.	25	Turner & Newall	10		
		Unilever	53		

"Recent Issues" and "Rights" Page 20

FINANCIAL TIMES
Monday August 24 1981

WILLIAM HALL ON THE BANKS' RIFT OVER CASHING OTHERS CHEQUES

Lloyds Bank starts 50p levy

LLOYDS BANK is to follow National Westminster Bank and levy a 50p charge on customers of Barclays Bank who cash personal cheques at branches of Lloyds Bank. However, it will continue to cash cheques drawn on the other big banks at no charge.

The move underlines the growing rift between Barclays Bank and the other big High Street banks over cashing each others cheques. In the past, bank customers have been able to walk into any of the 12,000 UK clearing bank branches and cash a cheque at no charge.

However, Barclays has announced that from September 1 it will charge 50p for cashing the cheques of non-Barclays customers at Barclays Bank counters. Barclays says it cashes 24m cheques a year for other banks while they handle only 12m Barclays' cheques.

When it announced the move in May, Mr Brian Pearse, a Barclays general manager, said he believed the imbalance resulted from improvements in Barclays counter services. If other banks' customers wanted to use Barclays branches they should be prepared to pay.

Mr Pearse said then that he would not be surprised if other banks followed Barclays' lead. However, shortly afterwards *National Westminster announced* that it would continue cashing other banks' customers cheques free with the exception of Barclaps customers who would be asked to pay 50p.

The other big banks believe that Barclays' aggressive charging policy is damaging their efforts to extend the banking habit and encourage the 40 per cent of the population without bank accounts to open an *account at a clearing bank.*

Lloyds Bank has followed National Westminster's example and Midland Bank is expected to make a decision soon. Midland has just completed a study to find out how many cheques it cashes for other banks' customers, and some of the bank's executives are known to favour adopting Barclay's hard line.

The controversy between the banks over their attitude to cashing the personal cheques of each other's customers comes at *a time when they are introducing* counter charges for consumer and mail-order credit payments by non-customers.

All the big clearing banks have announced identical 30p charges for giro credits payments made by non-bank customers, but there are considerable differences at the margin on just who is, and who is not charged.

Barclays will not charge non-*customers who make giro credit* payments through Barclays branches provided they are being made to a Barclays customer. The one exception is payments to British Gas—A Barclays' customer—which will be charged at 25p per item.

By contrast, Lloyds Bank appears to be planning to charge non-customers even if the payments are made to a Lloyds Bank account and Midland Bank appears to be charging its own customers if they pay in cash, *as opposed to by cheque.*

All the banks have made special exceptions and arrangements for certain groups of people and local managers have a certain amount of discretion to waive the counter charges, all of which makes the picture very confusing.

The banks will make very little money from the counter charges for non-customers, but it is hoped that the charges will *lead to improved service by re*ducing queues at bank counters.

World air controllers urge peace talks in U.S.

By Our Foreign Staff

LEADERS of the world's air traffic controllers ended an emergency meeting in Amsterdam yesterday without announcing any action in support of their U.S. colleagues dismissed this month for striking.

However, the International Federation of Air Traffic Controllers' Associations did not rule out the possibility of individual protests or boycotts of U.S.-bound traffic.

After a two-day meeting at Amsterdam's Schiphol Airport, the federation said members had decided to give "solid support" to the re*opening of talks between the* U.S. Administration and the U.S. Professional Air Traffic Controllers' Organisation (Patco) and it renewed its offer to mediate between the two parties.

The possibility remains that members might stage individual boycotts of U.S.-bound traffic, as Canadian and Portuguese controllers have done since President Reagan dismissed about 12,000 U.S. controllers earlier this month.

The meeting was attended by 32 delegates of the 61-nation federation, including Mr Robert Meyer, executive vice-president of Patco. Mr Meyer said he was pleased with the outcome of the conference.

Mr Meyer said he had shown the meeting evidence of a deterioration in the safety of U.S. airspace. A letter from Mr Tom Sheppard, chairman of the Air Traffic Control Committee of the American Airline Pilots' Association, said fatigue and poor qualifications were impeding the performance of air traffic controllers who have replaced the Patco members fired.

Reggie Dale, U.S. Editor, adds from Washington: Mr Drew Lewis, the Transportation Secretary, said that while he was happy to talk to representatives of the international federation, he would not negotiate with them. He would simply tell them how the new, replacement system handling U.S. air space was working and that it was safe.

Mr Lewis stressed on tele*vision that the Administration* was not playing games with people's safety and did not plan to do so. He repeated his refusal to talk to Patco, but was ready to meet representatives of the 9,000 people now manning the country's air traffic control system.

Mr Robert Poli, Patco's president, repeated his willingness to negotiate at any time and said that the replacement system was not working as well as Mr Lewis claimed.

THE LEX COLUMN

Nigeria and the oil glut

Some of the longest faces in town after the collapse of the Opec conference are being worn by companies with extensive trading links with Nigeria. The conference was requested by that country, and the outcome, "consultations in a spirit of co-operation and solidarity," was not what it had in mind.

Nigeria had budgeted for oil production of 2m barrels a day this year, but since January the level has fallen away to a mere 700,000 or less. Foreign reserves of $9bn are believed by outsiders to have come tumbling down to $6bn, already within spitting distance of the minimum considered acceptable by the authorities. The economy's dependence on oil means that Nigeria is now likely to cut its official price (it has already engaged in discreet discounts) in order to recapture sales.

But life is never that simple. An agreement on price in the Opec conference would have involved a cut in Saudi production and some tightening of the present glutted market. With the world still awash with Saudi crude, Nigeria may find it hard to entice buyers into new contracts, especially as its relationship with oil companies in the past has sometimes been less than cordial. Nor may it be the only player in the price-cutting game; there are already hints of close marking from Algeria. So Nigeria will be able to make up only part of the shortfall and the pressure on foreign reserves is likely to intensify.

Increased foreign borrowings may be part of the answer, although the schedule this year is already fairly heavy at *about $3bn and the Euromarkets* have been prone to indigestion in the past when too much Nigerian debt has been arranged. Recent foreign loans have tended to be tied to specific projects, and this form of finance means that the stream of contracts that have been awarded in the past nine months should be shielded. British contractors which have been major beneficiaries, such as Taylor Woodrow with £100m of orders outstanding, and Wimpey, will breathe a tentative sigh of relief.

So the main weight of any cutback is likely to fall on imports—not for the first time. In the last 18 months imports have been recovering strongly, and after the collapse in 1979, UK exports to Nigeria are forecast to hit a record £1½bn this year. But the Nigerian import approval system—the dreaded "M" form—is a weapon that could turn off the tap in four weeks flat. UK exporters to Nigeria have been switching from consumer items in recent years and while any cut would probably aim to discriminate in favour of non-consumer goods, there could well be general *chaos to begin with.*

The Nigerian uncertainty was one of the factors in the recent very cautious profit forecast from Ocean Transport. John Holt of Lonrho and UAC International of Unilever could also suffer. But perhaps the most vulnerable UK quoted stock is Paterson Zochonis, which derives about 70 per cent of its profits from Nigeria. The bulk of its turnover there now relates to manufacturing within the country; nevertheless, the share price has reversed part of its rapid performance of last year and now stands 27 per cent below the spring peak.

Food retailers

Food retailers have spent the past two years showing how *their volume and cash flow hold* up when interest rates are high and demand elsewhere in the economy is weak. The sector as a whole has outperformed the market by a third over the past 12 months, while the stores group has underperformed by 3 per cent.

The pattern has certainly not been uniform. Tesco, saddled with a relatively high level of gearing and an unsuccessful sally into non-foods, has dragged its heels while Associated Dairies and, in particular, Sainsbury have shot ahead.

This week's preliminary figures from Asda will provide an opportunity to examine the star ratings on which the more successful companies now trade. Analysts are not expecting the *group to show much advance* over the previous year's pre-tax profit of £50m and volume trends in the current year are not encouraging. Yet the shares now stand on over 20 times fully-taxed earnings.

For the time being at least, the volume picture is not too worrying. None of the major food retailers is spoiling for a price war and gross margins are slowly being widened to bridge the gap between costs rising at around 12 per cent and food price inflation closer to 8 per cent.

But the sector rating assumes that the majors, particularly Asda and Sainsbury, will continue to expand market share at the expense of the Co-op and the corner shop. Each has an extensive programme of store openings aimed roughly at the other's territory.

The latest AGB figures, which show a slight loss of market share for both Asda and Sainsbury, may not mean much since there is a shift towards fresh foods in the summer months and Asda has probably done well with its non-food items. But they do at least suggest that rapid growth in market share is not an inexorable process for *the majors. The performance of* these two companies has amply justified the widening premium over Tesco shares during the past year but, when demand for consumer durables finally begins to take off, the rating given to the high quality stores could be harder to sustain.

Cancer fear in Chinese N-test area

By Tony Walker in Urumqi

REPORTS of contamination on the fringes of China's nuclear testing site at Lop Nur appear to be arousing local criticism of the nuclear test programme.

An official in Urumqi, the capital of the far-western province of Xinjiang, said the increasing incidence of liver, lung and skin cancer was causing concern. Some cases are being sent to Peking.

He said: "Some people say it [cancer] is because of the testing."

A Western diplomat on a recent visit to Urumqi, 800 miles north-west of the test site, was told of fruit in at least one area developing "rubber-like patches" and the fruit itself tending to "wither away."

Another official was sceptical *of the reports of contamination,* saying that the high incidence of throat cancer among nomads in Xinjiang province was a result of their diet.

Medical teams and radiation experts meet reguarly to monitor the possible effects of the nuclear test programme, a third official said.

The Lop Nur site has been in almost constant use for 20 years for the detonation of nuclear devices, sometimes described as "dirty weapons" because of te high levels of fall-out they produce.

China is the only major nuclear power still conducting nuclear tests above ground.

China is secretive about its nuclear test programme and little is known in the West about the Lop Nur site.

China does not announce its bomb tests but the larger detonations are picked up by monitoring stations in the U.S. and Europe. The last reported test was in October, estimated by the U.S. to be equivalent to between 200,000 tons and 1 megaton of TNT.

Israel considers fund to help diamond industry hit by slump

BY DAVID LENNON IN TEL AVIV

THE Israeli Government is considering setting up a fund to help diamond companies overcome the difficulties caused by the slump in the world diamond market.

However, the Bank of Israel has denied that any commercial banks involved in financing the diamond industry are in danger of collapse because of bad debts.

Talks will be held shortly between the diamond trade and the Ministry of Industry and Commerce on ways to help polishers and brokers meet the high interest on their loans from the banks.

Mr Yoran Ziv, director general at the Ministry, said preliminary discussions have been held on the possibility of setting up a joint fund to help companies capable of surviving the problems caused by the continuing crisis.

The diamond companies' debts are reported in the Israeli Press to be $350m (£192m) to Union Bank, $280m to the Discount Bank, $100m to Barclays-Discount Bank, $90m to the First International Bank, and $50m to United Mizrachi Bank.

Israel, one of the world's main diamond-polishing and trading centres, has been severely hit by the fall in diamond prices in the past two years, after the boom of the late 1970s.

Many companies were left holding large stocks and a number went into bankruptcy or closed down. The industry still owes about $900m to the banks.

The Bank of Israel, the central bank, denied that the stability of any of the country's commercial banks is being endangered because some of their loans to the troubled diamond industry have turned into doubtful and even bad debts.

The First International Bank of Israel, the fifth largest bank, denied local press reports that it is in severe financial trouble because of ill-advised loans to diamond merchants. The bank yesterday announced a net profit of almost $5m for the first half of the year, "after provision for doubtful debts, including those to the diamond industry," according to a bank official. The bank is reported to be owed $90m by diamond companies.

*Mr Oded Meser, the Con*troller of Banks, said yesterday: "I do not see any danger to the stability of any of the banks in Israel, even if the doubtful debts turn into bad debts." He said all the banks would be able to meet their obligations, despite the doubtful loans made to the diamond industry.

The depressed state of the diamond market has made it difficult for many companies to clear their loans from the banks and in some cases even paying interest has been a major problem.

August jobless figures near 3m

BY PETER RIDDELL, ECONOMICS CORRESPONDENT

A RISE in total unemployment in the UK to close to 3m is likely to be revealed tomorrow when the mid-August figures are published.

The overall "headline" figure was 2.85m in mid-July and is likely to have been boosted since then by the usual rise of about 50,000 at this time of year and by an underlying increase in the adult total of the recent rate of 30,000 to *40,000 a month.*

The total may also have been artificially raised by the impact of the Civil Service dispute, which has delayed notification of the end of periods of unemployment.

The trend of unemployment among school leavers is uncertain this year both because of a change in the pattern among those aged over 18 and, more significantly, because of new rules preventing unemployed school leavers from receiving supplementary benefit until September. This may mean *that many have not registered,* though they may do so next month.

While the main public attention will be on the "headline" figure, policymakers and economists will look to see whether the seasonally adjusted adult total (excluding school leavers and the Civil Service dispute effects) confirms the considerable slackening in the rate of growth seen in recent months.

There will also be close attention to the trend of vacancies after the pick-up last month. If these figures are more favourable they will be taken as further evidence that the worst of the recession is over and that activity is flattening out.

Continued from Page One

UK-Soviet trade

ing a BSC proposal for a long-term contract: BSC imports much of its iron ore from the Soviet Union and exports their products such as strip from its South Wales works.

Mr Sushkov said: "It would be useful to form long-term economic relations with the Shell company." Shell is involved in high-level talks with the Soviet Union on oil technology, exploration and production.

He also described as "important" the present negotiations with BP on oil exploration in the Barents Sea and on possible British participation in the massive gas line planned from West Siberia. He referred to a major agreement signed with ICI, and contracts won by John Brown and Davy Corporation.

But he made clear Soviet anxieties about signing long-term contracts with countries where there is a lack of common ground on international questions.

Three months ago, Mr Sushkov visited London for the first Ministerial contacts between the two countries since the Soviet invasion of Afghanistan.

Last year, British exports to the Soviet Union, rose by 8 per cent to £453m while imports fell by 5 per cent to £786m.

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Laker Airbuses

as well as five McDonnell Douglas DC-10s.

The loans in question are a $131m (£69.7m) ten-year facility from a syndicate of 13 banks managed by Midland Bank International and a $228m (£121.3m) nine year facility from a syndicate managed by Eximbank, the U.S. Government-backed bank. The first was specifically designed for the purchase of the Airbuses.

Sir Freddie also dismissed a report that one of the Airbuses had been offered unsuccessfully for lease. "Every year the Airbuses are leased. Last year we leased to Lan Chile. We always lease our aircraft. That's part of our business," he explained.

In the few days since he had asked his bankers to reschedule the debt, he added, the the dollar had weakened against the pound and he had made several million dollars.

The only aircraft for sale, said Sir Freddie, were four BAC One-Elevens and two Boeing 707s. Laker Airways had already sold one of its One-Elevens and hoped to sell the remaining four for a total of about $10m.

In Washington, bankers representing the Eximbank managed syndicate met on Friday to consider Sir Freddie's proposals on rescheduling the debt.

Weather

UK TODAY

SUNNY in much of England andt Wales. Cloudy, with occasional rain in Scotland and Northern Ireland.

London, S.E., E. Anglia, Midlands, Cen. S. England.
Mostly dry, sunny periods. Max. 23C (73F).

E., N.E., N.W., Cen. N. England, Lakes.
Cloudy, some rain or drizzle. Max. 20C (68F).

Chan. Is., S.W. England, Wales.
Cloudy, sunny intervals. Max. 20C (68F).

IoM, Border, most of Scotland
Cloudy, occasional rain or drizzle. Max. 20C (68F).

Outlook: Mostly dry, sunny periods.

WORLDWIDE

		Y'day midday °C	°F			Y'day midday °C	°F
Ajaccio	S	25	77	London	F	18	64
Algiers	F	23	73	L. Ang.†	C	19	66
Amsdm.	F	18	64	Luxmbg.	C	15	59
Athens	S	30	86	Luxor	S	38	100
Bahrain	S	36	97	Madrid	S	27	81
Barclna.	F	26	79	Majorca	F	29	84
Beirut	S	17	63	Malaga	S	25	77
Belgrd.	S	24	75	Malta	S	31	88
Berlin	C	15	59	M'chstr	F	17	63
Biarritz	S	23	73	Melbne.	F	14	57
Bmghm.	F	19	66	Miami†	S	33	92
Blackpl.	F	17	63	Milan	S	25	77
Bordx.	S	25	77	Montrl.†	C	20	68
Boulgn.	S	17	63	Moscow	S	30	86
Brussels	F	17	63	Munich	C	14	57
Budpst.	R	17	63	Nairobi	C	22	72
Cairo	S	32	90	Naples	F	27	81
Cardiff	C	17	63	Nwcstl.	C	15	59
Cas'b'ca	S	23	73	N York†	C	20	68
Cape T.	C	15	59	Nice	S	25	77
Chicg.†	C	18	64	Oporto	S	25	77
Colgne	C	16	61	Oslo	F	22	72
Cpnhgn.	C	16	61	Paris	F	20	68
Corfu	S	31	88	Perth	C	17	63
Denver†	F	15	59	Prague	R	14	57
Dublin	R	17	63	Rykjvk.	R	13	55
Dbrvnk.	S	25	77	Rhodes	S	30	86
Ednbgh.	F	17	63	Rome	F	27	81
Faro	S	25	77	Salzbrg.	C	14	57
Florence	F	27	81	S'ciscot	C	14	57
Frankft.	C	16	61	Stckhm.	C	13	55
Funchal	F	23	73	Strasbg.	C	18	64
Geneva	C	20	68	Sydney	S	13	55
Gibrltr.	S	24	75	Tangier	S	28	82
Gl'sg'w	F	17	63	Tel Aviv	F	28	82
G'nsey	C	19	66	Tenerife	C	26	79
Helsinki	R	16	61	Tokyo	S	29	84
H. Kong	F	32	90	Toronto	C	16	61
Innsbrk.	C	13	55	Tunis	F	20	86
Invrnss	S	15	59	Valencia	S	28	82
Istanbul	S	25	77	Venice	F	24	75
Jersey	C	20	68	Vienna	C	17	63
L. Plms.	S	23	73	Warsaw	C	14	57
Lisbon	S	27	81	Zurich	C	12	53
Locarno	F	23	73				

C—Cloudy, F—Fair, R—Rain, S—Sunny, †Noon GMT temperatures.

Lloyd's rift over legal protection

BY JOHN MOORE

MORE THAN 200 underwriting members of Lloyd's of London, the insurance market supported by a private membership, may be forced to change their underwriting arrangements at Lloyd's, following an internal row between two of the most important companies in the market.

The row could have political repercussions for Lloyd's as it promotes its Parliamentary Bill for improving self-regulation within its insurance market.

At the centre of the row are two underwriting agency companies, the groups which look er the affairs of Lloyd's under after the affairs of Lloyd's underwriting members. For the first time in the 300-year history of Lloyd's, an underwriting agency company, PCW Underwriting Agencies, part of Minet Holdings, a large UK insurance broker, is seeking protection m legal action from the members of Lloyd's. PCW is insisting that Lloyd's members for whom it acts, should sign an agreement which could effectively prevent the Lloyd's members from taking legal action *against the agency company.*

Bland Welch Underwriting, an agency company which is part of the Sedgwick Group, the UK's largest insurance broker, opposes the initiative by PCW and has advised Lloyd's members for whom it acts that they should not be involved with PCW's underwriting arrangements.

The move by PCW, which has already been mentioned during House of Commons committee readings of the Lloyd's Bill for improving self regulation, could embarrass Lloyd's further if it is raised during later readings of the Lloyd's Bill.

Lloyd's has been seeking an indemnity clause in its new Bill to protect a new Lloyd's ruling council from damages from legal suits. This has provoked substantial political opposition. Lloyd's has argued that while the new council could not be sued for damages except where actions had been taken in bad faith, underwriting members would be able to sue underwriting agents and brokers for damages. The initiative by the Minet agency could undermine that argument.

Bland Welch, which opposes the move by PCW Underwriting agencies, has a partnership arrangement with PCW, and the leading underwriter of PCW, in a company called WMD Underwriting Agencies.

WMD manages the affairs of marine syndicate 174 which works jointly with non-marine syndicate 175. Syndicates are the units into which all Lloyd's members are grouped and PCW provides underwriting management services for WMD. Through the partnership arrangement Bland Welch has introduced more than 200 members to the syndicate.

PCW has drawn up a new underwriting agreement, with the controversial indemnity clause protecting the agency from legal action, which it wants members on syndicates 174 and 175 to sign. This has led to the dispute with Bland Welch.

The indemnity clause says that the agency, its officers and employees "shall have no liability whatsoever" to the member "arising from any actual or alleged wrongful act, default or omission or from any negligence," including from any fraud or wilful misconduct of any officer or employee. The clause does not appear to apply in circumstances where a member of Lloyd's wishes to make a claim through the courts against an individual employee personally for that employee's fraud or wilful misconduct.

But the clause, which is widely drawn, may prevent underwriting members from recovering large sums of money in a legal suit for damages against the agency company if they feel their affairs have been mishandled.

Because of the indemnity clause Bland Welch has advised its 200 or so members on the syndicates not to sign the agreement. If the members do not sign the agreement they will *be forced to leave the* syndicates.

Lloyd's ruling committee is understood to disapprove of the action by the Minet agency company but cannot intervene under its existing limited powers. Moreover, by no means all other underwriting agents, who between them have introduced around 1,000 members to syndicates 174 and 175 are worried about the indemnity clause in the agreement.

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